

DECEMBER, 1943

VOL. 42, NO. 12



H. S. WEBSTER, JR.
Vice-President and General Manager

CHARLES DOWNES
Editor

o o o

Editorial Staff

Legal Editor, Leo T. Parker
Materials Handling Editor, Matthew W. Polts
Air Cargo Editor, John H. Frederick
Staff Correspondent, Carleton Cleveland
Traffic Consultant, Henry G. Elwell
Refrigeration Consultant,
Van Rensselaer H. Greene
European Correspondent, Roger L. Simons

o o o

Advertising Staff

George Post, Production Manager
A. H. Ringwalt, Central Western Manager,
360 North Michigan Ave., Chicago 1, Ill.
Franklin 0829
Don F. Harner, Western Representative,
1595 Pacific Ave., Long Beach 6, Calif.
D. P. Macpherson, Special Representative,
700 So. Washington Sq., Philadelphia 6, Pa.

o o o

A Chilton Publication

Published Monthly by

DISTRIBUTION and WAREHOUSING
PUBLICATIONS, Inc.

100 East 42nd Street,
New York 17, N. Y.

Telephone MUrray Hill 5-8600

OFFICERS AND DIRECTORS

C. A. MUSSELMAN, President
H. S. WEBSTER, JR.,
Vice-President and General Manager
WM. A. BARBER, Secretary
E. P. BEEBE, Treasurer
J. S. HILDRETH O. B. BERGERSEN
CHARLES DOWNES

Copyright, 1943, by Distribution and
Warehousing Publications, Inc.
Established 1901

Subscription Rates

United States\$3.00 per year
Canada 3.50 per year
Foreign Countries 4.00 per year
Single Copies, 30c. each; except January Issue,
which is sold only in connection with a
regular annual subscription

Acceptance under the Act of June 5, 1934,
at New York, N. Y., authorized Feb. 8, 1939.

This Month in



Special Articles

Wines from the Guasti Desert	6
NIT League Convention	8
Sulphur . . . War's Busiest Chemical	10
The Economy of Traffic Management	11
The South and Lower Freight Rates	12
Present Freight Rate Making	13
Few Changes Foreseen in Distribution	14
Winter Driving Hazards	15
SAE Air Cargo Meeting	19
Fundamentals of Air Cargo Equipment	22
Air Cargo and Distribution	27
Watch Your Earnings on Investment	28
Industrial Trucks and Tractors	29
How Chicago Truck Operators Conserve	33

o o o

Regular Features

Editorials	5
Motor Cargo	16
Air Cargo	25
Distribution Worldwide	26
Materials Handling Manual	31
Legal News	32
Shippers' Supplies and Equipment	37
Index to Advertisers by Classification	37
Shippers' Service Section	45
Waterways and Terminals	46
Cold Storage	54
Readers' Comment	56
People	82
Factories on the Move	90

o o o

FIELDS SERVED BY DW

The publication in which shipper, carrier, receiver, warehouseman and equipment manufacturer meet on common ground to obtain and exchange ideas and suggestions for more efficient and economical distribution of raw materials and finished products. D and W is a clearing house of information for all who are interested in:

SHIPPING by air, highway, rail and water, of raw materials and finished products of all kinds, from points of origin to points of ultimate destination. D and W insists that efficiency and economy are as imperative in transportation of commodities as in manufacturing and selling.

HANDLING of raw materials and finished products, in bulk, in packages, and in palletized units, for and during production, transportation, storage and distribution. D and W submits that handling costs are a vital factor in determining profits.

WAREHOUSING . . of raw materials, finished products and miscellaneous supplies for any or all of the following reasons: as collateral for loans; to anticipate seasonal buying; to obtain lower rates by making bulk rather than l.c.l. shipments; to have spot stocks readily available at important market centers; as an aid in developing new markets. D and W maintains that, for efficient and economical distribution, intelligent and practical warehousing is indispensable.

DISTRIBUTION . . of anything anywhere from points of origin and production to points of ultimate use and consumption whether sectional, national or international. D and W takes the position that more efficient and economical distribution is the present major problem of modern business.



A POSTWAR GUIDE

For TRUCK-TRAILER Users

Motor transport operators are learning a postwar lesson from today's critical conditions. With rush schedules and overloaded facilities . . . shortages and priorities . . . there is a new appreciation of the importance of service in keeping the nation's Truck-Trailers rolling.

If you operate Fruehauf equipment, it is likely that your choice of Trailers was influenced by a knowledge of the extent and caliber of Fruehauf service. Your confidence was well placed. For Fruehauf maintains the only nation-wide Trailer service organization in the industry. Its only function is to help you keep your Trailers on the road.

Other Makes Serviced

If you do not own Fruehauf Trailers, you may also have learned to depend on Fruehauf service . . . as so many owners of other makes are doing. For surveys reveal that a surprisingly large volume of our field service is on other makes of Trailers.

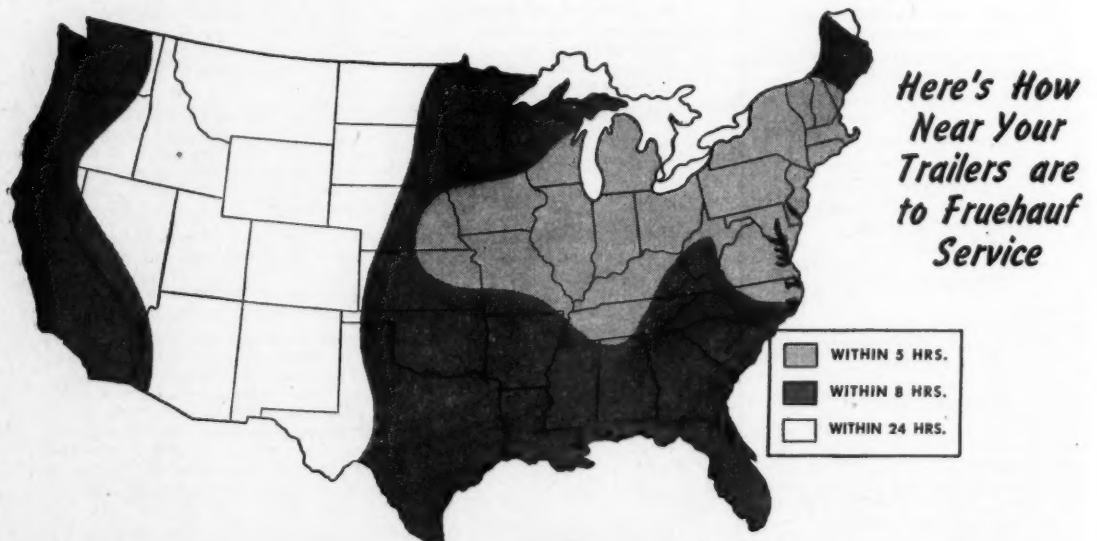
These owners get the same expert workmanship, the same prompt attention. And one of the nation-wide Fruehauf Factory service stations is conveniently close . . . wherever your Trailer may be.

Actually, 96% of America's Truck-Trailers are within eight hours of a Fruehauf factory service station. More than half of all Trailers are within five hours of one of these depots. A substantial number are less than one hour away.

Up-to-Date Facilities

In spite of war-time difficulties—and the very natural temptation to curtail—we are continuing to develop and expand our service facilities. And we're seeing that our Branches are given the benefit of the most up-to-date equipment and parts stocks . . . the best-trained personnel available . . . and the full resources of our factory organization.

As a postwar guide, the lessons learned during this critical period should help to emphasize that service is a major point on which to base your selection when you choose your next Trailers.



FRUEHAUF TRAILER COMPANY ♦ DETROIT

WORLD'S LARGEST BUILDERS OF TRUCK-TRAILERS

SERVICE IN ALL PRINCIPAL CITIES

Editorials . . .



Another Christmas

IN more ways than one, Christmas is not what it used to be. Particularly, it has not been the same since Pearl Harbor. Yet it is still a red letter day, indeed, the veritable day of days, that brings to a close the slow recession of the year, bestowing as it passes numerous associations and fond recollections upon every one of us.

No date upon the calendar is so hallowed by memories, for men and women of the western hemisphere, as this mellow and gracious festival. Consecrated by religion, immortalized by song and story, enriched by the traditions of 20 centuries, Christmas, in addition to its original significance, symbolizes something unquenchable in the human spirit.

Normally, most of us have an inherent desire for peace and good will. Today, in the midst of a war, unparalleled in cruelty and destructiveness, the desire for peace on earth is fervent and worldwide. When hostilities end, if any good will remains among men, this universal desire for peace may be an augury of hope for the future.

In the meantime, there is something very sobering in the reflection that while Christmas this year cannot be as happy as usual, indeed, may even be a day of sorrow and sombre memories for many, nevertheless, in one way or another, we shall all be affected by it. None can ignore it or escape the radius of its influence. Each one of us, after his own fashion, will grace or disgrace Christmas in his own heart. Even those who profess to hate it show by the very intensity of their feelings how impossible it is for them to be indifferent to it.

No amount of distortion or hypocrisy can disillusion us entirely or sway our hearts from the great ideal immemorably associated with the traditions of this day. There is profound significance in that. It is incontestable evidence of the indestructibility of human aspiration for something essentially human yet greater than humanity itself.

Unfortunately, many this year will be unable to express the jovial greetings of the season with customary heartiness. Let us, therefore, express instead an older and no less generous sentiment: "peace be with you"; for surely in these troubled times it is well to wish "peace on earth to all men of good will."

o o o

Paper

BECAUSE of the paper shortage, we have been directed to reduce our use of paper another 15 per cent. With the 10 per cent cut already in effect this will make a total curtailment of 25 per cent for the first quarter of 1944.

Consequently, starting in January, the type page size of D and W will be changed to 7 in. by 10 in., a reduc-

tion of one-quarter of an inch in width. The over-all size will be standardized at 8 1/8 in. by 11 1/4 in.

The purpose, of course, is to conserve paper. We have already reduced the weight of our paper stock. These changes will enable us to continue publishing, without curtailment, vital news and information for all of the industries we serve. There will be no reduction in the quality of our editorial contents or in the value of D and W's advertising pages.

o o o

Post-war Exports

ONE of the most crucial of post-war questions is likely to be international trade and the means of financing it. The essence of the problem was expressed at the recent Boston Conference on Distribution by A. W. Zelom, an able and well-known economist. His words are worth pondering.

"Lasting American prosperity," he says, "will be more easily achieved if we are able to export large quantities of industrial goods after the war. But we shall be faced with the question of how the greatest creditor nation can continue to export. In the end, exports can only be paid for with counter-exports, either of goods or services.

"It is not surprising that there is some fear lest other nations expand their own exports, flooding America with goods and thus paying their debts to us at the expense of our industrial supremacy.

"These fears will certainly continue to influence foreign trade and tariff policies unless all sections of the public can be convinced that a continuous excess of exports over imports is not necessarily favorable. Arguments will have to be expressed tangibly in terms that business and labor alike will understand. The problem is difficult but can be solved if it is approached with a sufficiently high degree of economic statesmanship."

It is a problem, we submit, that should receive immediate and detailed study. Every industry in America will be affected by it. The basic principles of a sound and long-range national policy should be formulated as soon as possible. The voice of every industry should be heard on the subject. To that end, hearings by a special joint committee of Congress should be undertaken at once.

o o o

Explicit

DURING the year now drawing to a close, much kindness and numerous courtesies have been extended to us by many friends, old and new. Unto all of you, our sincere and hearty thanks for your generous cooperation. In the year to come, may you enjoy abundant health and the fulfillment of your hopes!



This 5,000-acre vineyard, flourishing in the desert sands below the San Bernadino Mountains in California, draws water through its roots from a depth of 40 to 60 ft., and produces nearly 2,000,000 gal. of fine rich wines annually.

How Wines from the Guasti Desert Find Their Way to Your Table

In the face of an insatiable demand, plus the manpower shortage, restrictions placed on glass containers and transportation difficulties, the shipping, handling, storage and distribution of wines from vineyard to consumer have developed unprecedented problems.

NEARLY two million gallons of fine rich wines are produced annually at the plant of the Italian Vineyard Co., in the midst of a 5,000-acre vineyard that blossoms in the desert sands at Guasti, in the Cucamonga Valley near San Bernadino, Cal.

The storage, distribution, and shipping of so large a quantity of wine is all centered in the plant at Guasti. Today, with the present insatiable demand for wines, the proper distribution from the vineyard to the consumer has become a major problem.

In July, 1942, the Canada Dry Ginger Ale Co. took over distribution of the Italian Vineyard wines. A. L. Fouty is Western Division manager. Speaking of the origin of these romantic vineyards, recently he said:

"In 1883, 60 years ago, Secundo

By KAY LAMBEAU

o o o

Guasti, Sr., bought a parcel of land in the center of the desert known as the Cucamonga Valley. He built a home and, recognizing the richness of the soil under the dry white surface, he planted a vineyard of pure wine grapes. The vines grew luxuriantly, their roots penetrating the soil to a depth of 40 to 60 ft. for moisture. The grapes of those vines were blessed with an abundance of sugar, created through a combination of the warm rays of the hot sun during the day and the cool of the night that always prevails in the desert. Wines produced from those grapes were rich and full-bodied, and met with enthusiasm wherever they were served. Additional

acreage was planted until, with 5,000 acres in production, it became the world's largest vineyard. Wine grapes only are grown, 23 selected varieties constituting the basis from which all I.V.C. wines are made."

The problems of storage, shipping, and distribution developed progressively in direct ratio to the output as the vineyard grew in size.

The general process is something like this: The grapes are crushed as they become ripe and the period in which this action takes place is known as the vintage. The several grape varieties reach their peak of perfection at different times during a 45-day period beginning Sept. 1, thus permitting an orderly and properly timed schedule of crushing.

Storage is the first consideration, but

in the case of wines, the storage, under the present high demand for wines, is effected as the grapes are being crushed.

An annual average of 16,000 tons of grapes, slightly over three tons per acre are produced, and from this 1,750,000 gal. of wine are made. As the grapes are crushed, the juices are conveyed by pipes to the dozens of vats wherein fermentation takes place.

Fermentation requires from 2 to 10 days, depending on the type of wine desired, sweet wines require less time and dry wines a longer period. So-called sweet, or dessert wines are made by arresting the process of fermentation at the desired degree of sweetness by the addition of brandy or alcohol. This requires an alcoholic content of about 20 per cent. Before addition of the brandy, the wine is conveyed from the fermentation vats to fortifying tanks by pumps, after which it is again conveyed to other tanks for aging. Dry wines are allowed to ferment until all sugar has been changed into alcohol after which they are pumped from the fermentation vats directly into the storage vats for aging.

Fermentation vats are of about 3,500 gal. capacity each; fortifying tanks 30,000 gal. each; and storage or aging tanks vary from 5,000 to 35,000 gal. capacity. The Italian Vineyard Co. has storage space for 3,500,000 gal. of finished wines, this being ample for aging purposes. The different wines reach the peak of perfection variously and thus, some are ready for market anytime after one to four years. Of course, for perfection, conditions surrounding the wines during storage and aging must be right.

At the close of the crushing operations, comes the period of caring for and culturing the vines. Soil erosion from desert winds is the chief difficulty encountered. The vines are allowed to dry during the fall; the trees are then trimmed down to the bare stump to make room for the new shoots which always begin to appear early in spring, which in southern California means February or March.

Not Charity—Protection



Tuberculosis still exacts a heavy toll. Over 60,000 died last year from the disease. It kills more persons between 15 and 45 than any other disease.

There is much in the field of education and of demonstration that needs to be done. In these times it takes resiliency to adjust to changing needs. The tuberculosis associations have shown their ability to adjust. They must be encouraged to continue, and our encouragement can best be shown by the purchase of Christmas Seals as a sound investment in personal and community health insurance.

Christmas Seals are not charity. They are more than charity. In that paradox lies much of the success of the fight against tuberculosis. Christmas Seals appeal to the instinct of self-protection, as well as to the benevolent impulses of humanity.

As the laboratory declares each vat of wine ready for bottling according to its age, the bottling works get under way. Bottling facilities take care of 2,500 cases a day, 12 bottles to the case.

Because of the shortage of glass bottles, there are only half-gallon containers now, gallon jugs are no longer available. For the most part wine is now bottled in fifths for shipping.

"Glass is now being used for medicines for men overseas, and also is replacing tins for canned goods in the markets," according to Mr. Fouty. "At present we cannot fill all of our orders for bottled wines, but so far we have had sufficient bottles for the orders accepted."

All the wine remains Guasti until the orders come through from various districts for delivery to individual distributors.

"This is how it works," Mr. Fouty explained. "Canada Dry Ginger Ale, distributors, divide the United States into four areas. The Western division, for example, includes nine western States, Alaska and Honolulu, the latter two somewhat inactive because of the war."

"The home office of Canada Dry in New York makes the allocations by gallons to the district office in each area. The head office of the Western Division, for instance, is Los Angeles. Having been notified of his quota, the district manager then allots so much to branch offices by cities throughout his district. Of course in the monopoly states, the quota is determined for the whole state. In the United States, there are 17 monopoly states; in the Western Division, four—Washington, Idaho, Utah, and Montana.

"The wine still remains in Guasti. Canada Dry salesmen cover the distributors, in their own cities, and report their sales to the local office, which in turn sends a report to the head office in each division.

"In Los Angeles," Mr. Fouty said, "I receive orders from all the cities, or from the state officials in the monopoly states, in the Western Division. These orders, so far, have always consumed the entire allotment for the Western Division originally set up by the home office in New York.

"Orders are then sent by the four di-

(Continued on page 94)

LEFT: Storage or aging vats vary from 5,000 to 35,000 gal. capacity at Guasti, Cal. BELOW: Inside the bottling plant of the Italian Vineyard Co., Guasti, Cal.



NIT League Condemns Political Rate Making, Elects Keeler, Acts on Special Reports

RECOGNIZING that the transportation world may be standing on the threshold of a new era, officers and members of the National Industrial Traffic League, in Chicago, Nov. 16 to 19, for their 36th annual meeting, faced the task of deciding what part to take and how far to go.

Every phase of domestic transportation on land and water and in the air was examined in reports submitted by 41 standing or special committees and policies were adopted to govern the organization's future activities.

Political Rate Making: Statutory or "political" rate making loomed as the outstanding issue before this year's League sessions, but other problems as well were considered, ranging from "spotting charges" to "one-writing bills of lading," the relations of freight forwarders to l.c.l. shipments, intercoastal and coastwise transportation, the motor carrier situation, postal revenue bills and air cargo developments.

A resolution was adopted expressing emphatic opposition to the legislative rate-making bills now pending in Congress. Submitted from the floor by Lowe P. Siddons, traffic manager, Holly Sugar Corp., Colorado Springs, Colo., it stated categorically that, "The National Industrial Traffic League, in annual meeting assembled, records its opposition and objection to the several bills and resolutions (some 10 or 12 in number) now pending in Congress having to do with the revision of the railroad rate structure and amounting to attempts at political rate making, or pressure rate making.

Executive Sessions: In executive session the League considered numerous topics, including the proposed 4 p. m. closing of freight houses, penalty demurrage vs. embargoes, freight house congestion phases of highway transportation and other matters, but, although the press was generously permitted to sit in, it was placed under obligation to refrain from revealing the trend of the discussions.

Action taken in the open sessions was infinitely detailed and space does not permit a full report of action taken on all topics. Briefly condensed, some of the decisions reached on various subjects were as follows:

Aeronautics: A resolution was adopted recommending that the League support exclusive federal jurisdiction over the regulation of safety factors of aircraft operations with reservation to the states of their right to regulate purely intrastate economic matters. Opposition was expressed to the economic regulation of air contract carriers "at this time," and further study was called for of proposed regulation of international aircraft operations, private ownership and other matters.

One-Writing Bill of Lading: It was recommended "that the new form be made not mandatory."

Highway Transportation: "Sufficient new transportation equipment must be



J. B. Keeler, newly elected president of the NIT League.

manufactured and made available for civilian use to adequately provide for our highway transportation needs."

Freight Transportation Tax: A proposal favoring repeal of the tax was rejected and decision reached to take no action.

Freight Forwarder Joint Rates: The League's previously taken stand opposing such joint rates with motor carriers was reaffirmed.

Webster's Coined Air Cargo Words

Included in the report of the NIT League Aeronautical Committee, whose chairman was H. V. C. Wade, traffic manager, Richmond, Va., Chamber of Commerce, was the following paragraph:

"On Sept. 25 Committeeman Allen Dean issued for the account of the Transportation Bureau of the Detroit Board of Commerce an article captioned 'Webster's Dictionary of Coined Air Cargo Words,' by H. S. Webster, in which there is reproduced the definitions of some strange sounding, and strange looking, words. It may be that an acquaintance with 'double talk' will aid us to fit these new words into our vocabulary."

Editor's Note: New words are always strange. But the coined words in Harry Webster's dictionary, published by D and W last August, are already being used. As a recent instance we take pleasure in mentioning a subscription received from Robert H. Braun of Clark Tractor whose title is Motairhandling Engineer.

Carrier Rate-Making Bureaus: Interested parties should have the right of appeal of Classification Committee actions; all rate making bureaus should provide adequate notice of all dockets and disposition notices; a uniform period of advance notices of all hearings (12 to 45 days) should be provided by all carrier committees and bureaus, except on emergency dockets; all action taken by bureaus should be decided by majority vote and secret ballot; individual common carriers should always have the right to request suspension of schedules published by carrier of same or of different type.

Intercoastal and Coast-wise Transportation: Recommendation of committee adopted that the League endorse the principle that coastwise and intercoastal steamer service is essential to the national defense, also to the economic development of the country and that the resumption of full commercial service should not be delayed beyond the actual necessities for successful prosecution of the war, this service to be under private ownership and management.

Postal Service: Support authorized for H. R. 1299, empowering the Postmaster General to require any common motor carrier to transport mail matter.

New Officers: John B. Keeler, asst. general traffic manager, Koppers Co., Pittsburgh, Pa., was unanimously elected president of the League for the ensuing year. He succeeds Ralph R. Luddecke, general traffic manager, Standard Brands, Inc., New York, who had held the post for two terms.

For vice president to succeed the late Clare B. Tefft, Toledo, O., the League selected Alonzo Bennett, vice president, Federal Compress & Warehouse Co., Memphis, Tenn. R. W. Campbell, traffic manager, Butler Paper Corp., was continued as treasurer.

Regional vice presidents were elected as follows:

New England: Wm. P. Libby, v. p., Plymouth Cordage Co., North Plymouth, Mass. Trunk Line: J. S. Wood, v. p., Pan American Petroleum & Transport Co., New York. Central Freight: Geo. A. Blair, g. t. m., Wilson & Co., Inc., Chicago. Western Trunk Line: L. P. Siddons, t. m., Holly Sugar Corp., Colorado Springs, Colo. Southwestern: F. A. Leffingwell, sec.-treas., Southwestern Industrial Traffic League, Dallas, Tex. Southeastern: M. M. Emmert, t. m., Coca-Cola Co., Atlanta, Ga. Northwestern: Martin F. Smith, sec., Southern Minnesota Mills, Minneapolis, Minn. Pacific Coast: W. G. Stone, mgr., Transport. Dept., Sacramento Chamber of Commerce, Sacramento, Cal.

Membership: During the past year 146 new members were enrolled, the largest in any one year of the League's existence, E. F. Lacey, executive secretary, reported. This brings the total membership to 946, he stated.

Next Meeting: The next annual meeting will be held Nov. 23 and 24, 1944, at the Hotel Pennsylvania, New York, with the two preceding days, Nov. 21 and 22 devoted to sessions of the executive committee. (Slawson)

DOUBLE-ACTION ADVERTISING



with

MEYERCORD DECALS

Two-way use of Meyercord Decals pays Gordon Baking Co. plus advertising dividends and performs a patriotic service as well! No critical metals involved. Effectively utilizing free truck space, Meyercord Truck Decals spotlight "Silvercup" on every vehicle in Gordon's fleet at a fraction of hand-painting cost. Then Meyercord Decal door signs identify Silvercup dealers . . . tie in with vital war programs . . . and sell Silvercup at the point of sale. Investigate the economy and long life of a complete program of brand identification with colorful Meyercord Decals. Cash in on highway traffic, sidewalk and store traffic, with truck Decals, spot window and door signs, store-front valances, back-bar, show case and road signs, etc. Free designing and planning service. For complete details, address Department 3012.

Back the Attack . . . Buy War Bonds



Reverse or store side of Silvercup door sign sells bonds, nutrition, Silvercup and adds a pleasant "thank you" to departing customer. Photos courtesy of Gordon Baking Co.

THE MEYERCORD CO.

World's Leading Decalcomania Manufacturer

5323 WEST LAKE STREET • CHICAGO 44, ILLINOIS

SULPHUR . . .

War's Busiest Chemical

When Hitler was forced out of Sicily he lost the most important source of sulphur that Germany had. Sulphur is vital to war industries and equally vital to civilian existence. It helps to keep us alive, healthy, clothed and housed. In various forms, it helps to produce pulp and paper, rayon, paint and varnish, refrigerants, soap, glass, beltings, bleaching agents, dye stuffs, celluloid, sugar, glycerin, resins, fire extinguishers, ink, food preservatives, matches, and many other indispensable articles.

By RAY M. THOMPSON

BEHIND the headlines announcing the fall of Sicily was a sensational news story ignored by the newspapers.

When Hitler was forced out of this Italian island he lost more than men and morale and a military advantage; he lost practically the only source of sulphur that Germany had.

Was this serious? Well, if he did not foresee the possibility and did not store away somewhere a huge stockpile of this vital yellow stuff he has lost more than a hunk of territory; he has lost the war. The reason is simple: sulphur, without a doubt, is the war's busiest chemical.

Few of us realize two very fundamental facts: that the world's largest sulphur producing field is in the United States, and that sulphur, in some form or other, enters into the manufacture or composition of nearly every article of commerce we use.

Take just one illustration, the airplane. For tires and engine mountings, sulphur vulcanizes the soft natural rubber into a tough, wear resisting product. For propellers and sharp, air-cutting noses of some fast warplanes, it pickles

or de-scales steel. For engine castings and crucial parts demanding lightness combined with strength, it helps in the molding of magnesium, the lightweight champion of metals.

Sulphur helps make synthetic rubbers for sealed gas tanks and hose, film for the telescopic cameras that are the eyes of the air force, leather and fabrics for the protective clothing of the crew, flares and smoke screens, gas masks, medicinals and the high explosives in the bomb bays.

But sulphur's contribution doesn't end with the plane itself. It also helps it fly. The powerful engines burn high-octane squeezed from ordinary crude petroleum with the aid of sulphuric acid. Engine parts slide across each other at terrific speeds on their films of special lubricants refined with sulphuric acid to stand up under the high bearing pressures.

In fact, sulphur, by the mere fact that the extensive use of sulphuric acid is so prominent in the petroleum refining industry, helps run not only airplanes but everything that rolls, floats or flies. Are



Courtesy Freeport Sulphur Co.

TOW-BARGE TOW of sulphur moving out toward the Mississippi on its journey north. The speed boat is part of the Freeport Navy, the means by which the company's employees get around in the bayous.

you beginning to see just what the loss of Sicily's sulphur can mean to the Axis?

Let's go farther, into the steel industry. Much of the nation's steel must be pickled or bathed in dilute sulphuric acid to remove the scale before it can take its place in the construction of ships, armaments, barges, tanks and other war materiel.

Then there is natural rubber. Vulcanization makes the natural rubber strong and heat resistant. Approximately one pound of sulphur goes into every 34 lb. of vulcanized rubber. Sulphur is needed, too, in the synthetic rubbers such as Ameripol. About 20 lb. of sulphuric acid goes into the production of each 100 lb. of Ameripol.

While only a fraction as much sulphur is used per unit of explosives today as was used in World War I, sulphur helps forge the vital three-link chain that constitutes modern military explosives. In conjunction with cotton linters, wood pulps, nitric acid, ether, alcohol and other materials, sulphuric acid plays a part in making such important propellants as smokeless powder and cordite, such intermediate detonators or boosters as tetryl, picric acid and TNA, such high explosives or bursting charges of TNT, amatol and the so-called Explosive D.

And don't forget the field of medicine. The life saving sulfanilimide and its derivative drugs are performing medical miracles.

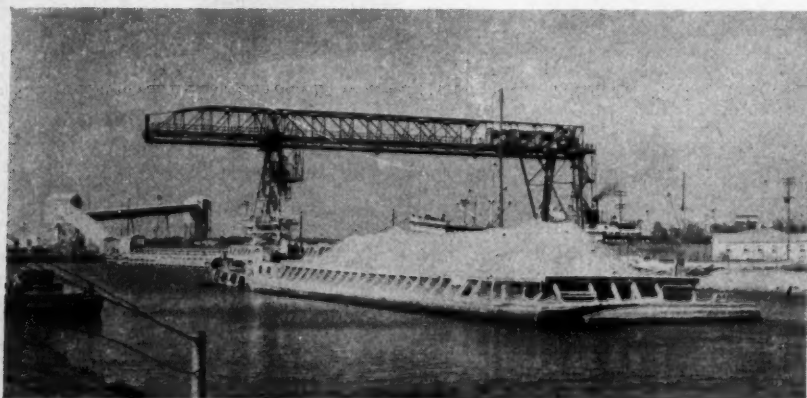
Sulphur, outside of its war work, helps keep us alive and healthy, clothed and housed. In the form of sulphuric acid, it dissolves phosphate rock to make fertilizer. As dust or spray, it fights harmful agricultural blights, insects and diseases. In various forms, it helps produce pulp and paper, rayon, paint and varnish, refrigerants, soap, safety glass, beltings, bleaching agents, dye stuffs, celluloid, sugar, soda, resins, fire extinguishers, ink, food preservatives, matches, glycerin, solvents and many other articles.

Sulphur is not only our busiest chemical, it is also our cheapest, selling for less than one cent per pound in a 99.5 per cent pure state. And, fortunate for us in the U. S., it is very plentiful. Uncle Sam started the war with a stock pile of 3,000,000 tons and we mine about

(Continued on page 50)

SULPHUR BARGE in tow at Grand Ecaille, La. In the background may be seen the South American freighter Rio Chico.

Courtesy Freeport Sulphur Co.



The Economy of Traffic Management

No. 1—Relatively Few Executives Know How to Use A Traffic Department to Advantage

Many executives fail to grasp the fact that a tremendous change has been brought about by competitive conditions and interstate commerce regulations. Wartime problems and post-war planning make it more imperative than ever for executives to know how and why an efficient traffic department can help relieve many executive 'headaches.' Better cooperation between the executive and traffic departments can eliminate a lot of needless waste.



By HENRY G. ELWELL
Traffic Consultant

TODAY in industry there is a trend toward a better understanding of the place of traffic management—the traffic department—in the business structure. But many executives still fail to grasp the fact that a tremendous change has been brought about by competitive conditions and interstate commerce regulations as applied to railroads, motor trucks, carriers by water and freight forwarders.

The regulations affect every industry. The elements of competition reflect the same process of evolution in regard to traffic management as in all other functions of manufacturing and marketing. In addition, wartime conditions and post-war planning requirements make it more imperative than ever for executives to know something about the work involved in traffic management.

Executives Should Realize . . .

The average industrial executive has fostered amazing advances in production. He is fully alert to the importance of cooperation in that field. He should realize the importance of traffic management as related to his business likewise. He should realize that nearly every activity of business embraces some sort of traffic and transportation principle. If this fact is not realized waste will continue in industry despite all efforts to combat it. Moreover, industrial executives should definitely realize that merely assigning the title "traffic manager" to an officer of the company or to a member of the staff does not in itself provide for efficient traffic management.

In any discussion concerning traffic management many of the so-called smaller concerns apparently believe they can ignore real traffic administration, in spite of the fact that their larger rivals make full use of this aid. Just what is meant by the term "small company" in relation to traffic department control is not clearly understood by this writer, as some companies employing as many as one thousand workers insist they are in this class. Actually, both "small" and "large" in the industrial field have need for traffic administration. And each part of an industry—purchasing, production, sales, etc.—also has the same need.

Basic Traffic Management . . .

Right here it may be well to point out that the basic function of industrial traffic management is the direction of the movement of raw materials and finished products of all kinds from points of origin to points of ultimate use or consumption. It is thus apparent that the interests of this department are in turn the interests of each of the other major departments of a business; and, as in all such cases of interlocking or mutual interests, better cooperation and greater benefits accrue from an appreciation of what these common interests are.

In this first article we begin with the executive department and throughout the series touch on the major subdivisions, keeping in mind that even where a manufacturer, or distributor, may not maintain all of the departments separately, yet the basic functions of each department are present in practically every business.

Executives Can Benefit . . .

By the term executive department we mean that part of an industrial or mercantile organization consisting of the president, the vice-president, the treasurer, the secretary, the general manager, the plant managers and such other department heads as have to do with company management and the making of company policies.

There are various ways by which an executive department can benefit through cooperation with a traffic department. Several phases of production and distribution require the advice and assistance of a traffic department. For example, an analysis in connection with the location for a new plant, or a branch factory, or selecting warehouse points for stocks, should include a study of transportation costs prepared by a traffic department.

Numerous Instances . . .

There are numerous instances where plants have been erected, with no thought of consulting a traffic department, and then abandoned because costs of transportation could not be adjusted to the level necessary for profitable op-

This is the first of six articles by Mr. Elwell, D and W's traffic consultant and president of Elwell, Philips & Co., Inc., Elizabeth, N. J.

Mr. Elwell is singularly well qualified to discuss the economy of traffic management in relation to other functions of manufacturing and marketing because of his special training and long practical experience as a traffic manager, transportation expert and marketing counsellor.

As president of Elwell, Philips & Co., Inc., he is traffic manager for a number of manufacturers, and other shippers, with plants situated in various sections of the United States. He was formerly traffic director of the Elizabeth Chamber of Commerce, resigning from that post in 1928 to give full time to his present activities.

Mr. Elwell is a practitioner before the ICC and the U. S. Maritime Commission, and is a member of the Assn. of Interstate Commerce Commission Practitioners.

In addition, he is a member of the Mfrs.' Assn. of New Jersey, the Traffic Club of Newark, N. J., the Rotary Club of Elizabeth, the Elizabeth Chamber of Commerce of which he is chairman of the Traffic Committee, and the Industrial Traffic Committee of the New Jersey State Chamber of Commerce of which he is vice-chairman.

Among non-traffic organizations he is a member of the New Jersey Society of the Sons of the American Revolution, the New Jersey Society of the Founders and Patriots of America, of which he is a governor, and the New England Genealogical Historical Society.

o o o

eration of the new plants. Again, warehouse centers have been designated without obtaining advance information from a traffic department, with the result that money was lost because of improper selection of the particular warehouse locations. There are cases where, with all factors at hand, including a transportation

(Continued on page 52)

IT'S taken a long time and a long fight, but at last victory is almost within the grasp of the South and West in their struggle to obtain lower freight rates.

Of vital importance to these two sections of the nation, therefore, is the soon-to-be-handed-down decision of the Interstate Commerce Commission. On this decision will depend the future rate structure of all territory east of the Rocky Mountains. The ICC's decision will be based upon its findings in the investigation of class rates on manufactured goods which it instituted back in 1939. Incidentally, this investigation is probably the most comprehensive and important study of the nation's freight rate structure ever conducted.

Purpose of the present investigation, according to the commission, is to "determine whether the present class-rate structure within the territorial scope of these proceedings can be simplified and a lawful rate structure better suited to existing conditions can be established."

Opposed to Frozen Rates

Although Congress now is considering legislation which would lower freight rates, Southern leaders are not at all enthusiastic about it, as badly as they desire lower rates. They feel that legislative relief would result in a frozen rate structure that would bode no good for the future. Almost all of the present legislation is based upon the findings of the Transportation Research Board authorized by the Transportation Act of 1940.

A study of the commission's decisions during the past several years reveals a trend towards lower freight rates for the South and West, and leaders in the rate fight now are confident that the presently awaited decision will be a victory. In spite of their confidence, or because of it, Southern leaders in eight Southern States — Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, North Carolina, and Tennessee—banded together recently and filed with the ICC a brief setting forth their position. The brief was presented on behalf of the Southern Governor's Conference by Gov. Prentice Cooper, Tenn., conference chairman; Gov. J. M. Broughton, N. C., chairman of the conference's Class Rate Committee; and Counsels Warren H. Wagner of Washington and J. V. Norman, Louisville, Ky. It will be argued before the commission sometime after the commission issues its proposed report.

It is especially fitting that Governor Broughton should be chairman of the Conference's Class Rate committee, for North Carolina long has suffered irritation arising from the proximity of the official territorial limit to its borders, and consequently has actively led the freight rate fight over a long period of years.

Official Territory

Official territory is the territory in the Northeastern part of the United States. The territory's line of demarcation runs from Cairo, Ill., to Norfolk, Va.

PRO:

Why the South Is Entitled to Lower Freight Rates

By JANE TYSON HALL

THIS argument presented on behalf of the South, and written by a trained newspaper reporter on the staff of the News and Observer, Raleigh, N. C., emphasizes that present alleged discrimination in freight rates is restrictive of the full economic development of the South, and that the concentration and specialization now existing in Official territory is not conducive to the full development of the country as a whole. Statistics are cited to support that statement. This paper is presented without bias by D and W so readers may appreciate both sides of the current controversy.—The Editor.

o o o

The fact that the Official Territory line is only a few miles from the North Carolina-Virginia State line has made North Carolina merchants and shippers hot under the collar. The rates to North Carolina towns are made by adding the low rates to Virginia cities to the sharply increased rates from the Virginia cities to North Carolina outlets, and Tar Heel merchants in the northeastern section of the State have found it cheaper to employ Norfolk commission merchants and pay them a commission, than to order goods shipped directly from northern or western factories.

Of significance is the fact that Virginia is absent from among the Southern States which filed the brief. There is, however, a reason for this. The limits of Official territory now run through southern Virginia, and most of the State, therefore, enjoys the favorable Official Territory rates. The action of three railroads—the Baltimore & Ohio, the Norfolk & Western, and the Virginian—plus the action of North Carolina in bringing suit against the A & W Railroad in 1934, is responsible for this state of affairs. The three railroads, being in competition with the trunk lines to the North, equalized Norfolk and Lynchburg with Official Territory, and the continued protests of other Virginia cities in the territory served by the roads and the action of the Old North State in suing the A & W Railroad caused the limit of Official Territory to be laid in southern Virginia.

Of course, Virginia merchants and shippers beyond the Official Territory line are hot on the trail of lower freight rates, but the State as a whole is sitting on the fence, so to speak, and hasn't much to say in the current argument.

Origins of Controversy

Actually, the fight in the South is his-

toric; it budded in the years immediately following the War Between the States and came into full flower after the turn of the century. When railroads began invading the South they had stiff competition from waterborne traffic. The South was surrounded by navigable water and had many interior navigable waterways. In fact many of the early railroad lines furnished links between waterways or acted as feeders. As a result of this situation, and in order to meet the competition, the railroads gave very low rates to port cities and to cities located on navigable inland streams, and made up the difference by charging high rates for the transportation of freight to and from cities not situated on navigable water.

Basing Point System

This situation gave rise to what became known as the "basing point system"—a method of fixing rates based upon rates to the large trading centers, and the distance of other towns from these centers. In time the railroad competition with waterborne traffic was supplemented by equally keen competition between railroad lines, with the result that low rates were accorded to important railroad junctions, such as Atlanta, which were not situated on navigable water.

Now add to this picture the fact that at the time railroad building began in the South this section of the country was entirely agricultural and the only goods moving out were agricultural products, and you can see how, eventually, the Northwest portion of the country, with its large concentration of factories, soon became favored territory.

This state of things might have continued without too much complaint had

(Continued on page 66)

CON:

This So-Called Inequality In Present Rate Making

By DOUGLAS MILLER

THIS argument presented in support of the present system of making freight rates, and written by an experienced traffic man who is general traffic manager, The Englander Co., Inc., New York City, denies categorically the allegation that freight rates in the South and West are discriminatory, and quotes statistics in support of the statement that industry in the South has expanded rather than diminished. It emphasizes the importance of flexibility in freight rate making and argues against allowing the matter to become a political issue. D and W presents this paper without bias.—The Editor.

• • •

THE present system of making freight rates through consultation and cooperation between the shipping public and carriers, subject to approval either by the Interstate Commerce Commission or the various Public Service Commissions, or both, is threatened by the action taken by interests in the South and West.

The so-called inequality of freight rates has become a political football. Governors and even the Vice-President of the United States have entered the fight to right an alleged wrong.

The oft-repeated statement that rates on manufactured articles from the South and West to the North and East are higher than the rates in the opposite direction is false. The mere fact that the statement has been made so vigorously doesn't prove anything. Rates are generally the same in both directions. When there are exceptions the rates on northbound and eastbound traffic are usually lower and not higher than those in the opposite direction.

Southern Industry

The South and West claim that manufacturing in their territories has been held back because of the freight competition with Northern and Eastern manufacturers. The United States Census of Manufacturers shows that in the eight states included in Southern freight rate territory "the number of manufacturing establishments increased 1.8 per cent, while the number in the United States as a whole decreased 4 per cent for the period from 1927 to 1939." It is also interesting to note that the value of products manufactured increased 13.2 per cent in the South and West while the balance of the country showed a decrease of 9.4 per cent.

The politicians now playing football

with this matter make many ridiculous statements regarding the inequalities of the rate structure.

They have merely looked at a class rate tariff and have found them higher in the South and West than in the North and East and on that basis shout "inequality and discrimination." They overlook those other rates on which over 90 per cent of the freight in their sections move daily to all other sections of the country.

Manufacturing has gone forward faster in the South and West than it has in the North and East during the past 20 years. Incidentally, the present rate structure was in existence then. So why all the noise now,

Flexible Rates Needed

Our rate making system must be flexible and adjustable enough to meet the ever-changing conditions of the industry.

The need to move freight cheaply, expeditiously and safely is the job of all persons connected with transportation whether they are shippers or carriers and not politicians.

Legislation Proposed

As a result of the cry of "inequality and discrimination" the following bills proposing "uniformity" have been introduced into Congress:

S. 1030 and H.R. 2547 provide that the entire United States be divided into zones or units of area, each being "identical with a quarter of the area formed by the intersecting parallels of latitude and meridians of longitude" and specifying that "such units of area shall be the basis of eight railroad rate zones," with scales of railroad rates, both carload and less than carload, on "each commodity or class of commodities . . . which are

uniform, in relation to distance, throughout the United States." It is further provided that the rates from and to all points in any one of the units of area shall be the same and that "after such rates have become effective, no other rates shall be published, maintained or charged by such common carriers (railroads) for such transportation service." These bills, in other words, fix rigid zone or block basis for all railroad freight rates.

H.R. 2436 provides that there shall be on the railroads "a uniform classification of freight and a uniform scale of freight rates for application in interstate commerce throughout the United States." In other words, all railroad freight rates shall be made on an absolute distance basis without regard for the special needs of particular commerce, sections of the country or carriers.

S. 947, H.R. 2391 and H.R. 2435 are similar except that by their terms they are limited to establishing a uniform classification and a uniform scale of class rates, permitting such modifications in this uniform classification and scale of class rates as are required by differences in cost of rendering service and the revenue needs of particular carriers, in order to insure adequate transportation service in particular areas.

S. 1124, H.R. 2645 and H.R. 3183 are also identical with the group of bills mentioned above, except that "individual commodity rates" are authorized where the Interstate Commerce Commission approves; that other exceptions and modifications of the uniform classification and scale of rates may be made where the Interstate Commerce Commission deems them necessary "to correct inequitable conditions, provide adequate transportation in particular areas or provide adequate revenues for particular railroads," and that the Commission may prescribe reasonable rate groupings, rate-making distances and mileage blocks.

H.R. 2519 declares that "the establishment of a classification of freight and a scale of class rates apply to the transportation of property by common carriers by railroad . . . so adjusted as not to discriminate among regions or territories in the United States is necessary in the public interest," and makes it the duty of the Commission "to give full effect to the declaration."

While most of the bills above are limited in their direct effect to classification and class rates, and some of them specifically permit the making of commodity rates and exceptions, these limitations are illusory.

No industry and no section of the country which might feel itself adversely affected by the adoption of the proposed "uniformity" would sit idly by and see other industries and sections both gain the benefits of class rate "uniformity" and at the same time retain their present lower rates published in the form of "exceptions" or special "commodity rates."

Relatively Few Drastic Changes Foreseen In Post-War Methods of Distribution

OUTSTANDING figures in business, government and the marketing profession presented facts and expert opinions concerning present and future marketing problems in Cleveland, O., last month at the National War Conference of the American Marketing Assn. Discussions centered around four topics: changing markets, product development and transportation, price control, and channels of distribution.

Changing Markets. Dr. Alfred N. Watson, assistant manager, Commercial Research Department, Curtis Publishing Co., analyzed war-time incomes and consumer markets pointing out that "even with high incomes in the lower class brackets the middle class finds itself with lowered purchasing power," and that "an accumulating deficit for goods and services has resulted." He stated that consumer savings were the answer to the post-war market.

Dr. Philip M. Houser, assistant director, Bureau of the Census, discussed market changes of a geographic nature caused by war-time shifts of population. Many towns, he said, will not hold their present growth. In many towns, however, he added, war workers will be absorbed by the service industries and the return to production of civilian goods thus insuring such cities against a total loss of war-gained population.

Dr. C. L. Burrill, petroleum economist, Standard Oil Co., of N. J., stated that petroleum marketing after the war would show: 1. More product pipe lines in use and, 2., a relocation or enlargement of many bulk tank plants to take care of changes in population that may persist after the war.

Product Development and Transportation. George F. Nordenholt, "Product Engineering," pointed out many new developments in materials, plastics, light metals, and high-strength metal alloys which have not only solved many war-time production problems but also prom-

ise to revolutionize many consumer products after the war.

Stuart B. Walker, manager, Service Division, United States Testing Co., Inc., warned that the development of new products should be controlled by the consumer market as soon as demands from the armed forces ends. In other words, "just because a thing is new or made of new materials there is no reason for acceptance unless performance is obtained," he said.

Air Cargo. Dr. John H. Frederick, Air Cargo Editor, *D and W*, and professor, Transportation and Industry, University of Texas, discussed the ways in which air transportation, particularly the availability of air cargo transportation after the war, might affect product development and marketing.

"There are at least seven ways in which air transportation may affect marketing, perhaps not all at once, but certainly as time goes on and as the potentialities of air cargo are fully realized and capitalized on by marketing men," Dr. Frederick said.

"1. All marketing activities will be quickened by air transportation. 2. Manufacturers will distribute for a national rather than for section or regional markets. This will be particularly true for style goods. 3. National advertising will become of increasing importance. 4. Perishables will move by air thus providing greater variety and better products for consumers in all parts of the country and in some foreign markets as well. 5. The marketing area for most producers will be greatly broadened from a sales and service standpoint. 6. Marketing systems may change. More direct marketing, more closely controlled distribution may result. 7. Retailers' stocks will be smaller. Wholesalers in some lines may disappear. Retail establishments may be smaller in size with stock rooms largely eliminated and sales being from samples with next day deliveries

from manufacturers assured by air cargo.

"Product development will keep pace with air transportation and its effect on marketing in at least four ways," Dr. Frederick said.

"1. Products will be designed so that they can be carried by air. They will be planned to use this type of transportation. 2. New lightweight metals, new plastics will play an increasing part in product design with air transportation in mind. 3. Air transportation itself will give rise to a need for certain new products, many of which we probably haven't thought of as yet. 4. Packing will be revolutionized. Air cargo will receive more gentle handling than has ever been the case with ground transportation. Thus one marketing cost will be reduced."

Price Control. Dr. Julius Hirsch, economic consultant, and Dr. Charles F. Phillips, Office of Price Administration, discussed the evolution of price control during the war and what may occur in this field in the post-war economy. There seems to be fear of a period of heavy employment right after the war followed by a period of practically no employment, he said. To avoid such a situation, he suggested, there is need of restraint immediately after the war with respect to expansion of private business. "This restraint," he said, "might be supplied by price control."

Channels of Distribution. J. J. Nance, vice-president, Zenith Radio Corp.; Herbert Metz, sales manager, General Lamp and Lighting Division, Graybar Electric Co., Inc.; Godfrey M. Lebar, "Chain Store Age," Carl W. Dipman, "The Progressive Grocer," and Jay Iglauer, vice-president, Halle Brothers, Cleveland, discussed different aspects of channels of distribution. The consensus was that no very radical changes in channels of distribution would come immediately out of the war. In other words, wholesalers, jobbers, independent retailers, chain and department stores will be in relatively the same position in the distribution channels for several years. Changes may take place, it was said, but they will constitute "an evolution not a revolution" in distribution.—J. H. F.

Common Carrier

Lyon Van Lines, Inc., Los Angeles, has been issued an ICC certificate authorizing operations as common carrier between points in California and Oregon and Washington. Simultaneously the ICC authorized Lyon Van & Storage Co., Los Angeles, to operate as a common carrier between Los Angeles and Los Angeles Harbor over regular routes. (Herr)

Three Major Warehouse Conventions Will Be Held at Chicago in February

ACCORDING to present plans, the three major national warehouse associations will hold their annual conventions next year, as they did this year, in February at the Edgewater Beach Hotel, Chicago, Ill.

Although still tentative at this writing, and subject to approval by ODT officials, the dates chosen by the Mayflower Warehousemen's Assn. are Feb. 11 to 14 inclusive. However, this is

subject to change, as it may be decided to limit the meeting to three days.

The war-time warehousing industry conference sponsored by the American Warehousemen's Assn. is scheduled for Feb. 15, 17 and 18. The National Assn. of Refrigerated Warehouses, a division of AWA, will meet at the same time as a section of the AWA convention.

The National Furniture Warehousemen's Assn. will hold its convention Feb. 21, 22 and 23.

Winter Driving Hazards

Survey conducted among 103 trucking fleets operating in 48 states indicates many are short of normal winter driving equipment. Fleet shops should recondition and salvage old equipment to insure as much safety as possible for drivers during coming winter.

By E. L. ERICKSEN

Secretary,
Committee on Winter Driving Hazards
National Safety Council

• • •



TRUCK OPERATORS should be preparing now to meet winter conditions on streets and highways. Traffic accidents in the snow belt last winter ran the mileage death rate up to 24 per cent higher than the summer toll, according to the National Safety Council.

TO determine how well the commercial vehicle fleets of the nation are prepared to cope with sleet, snow, ice and cold, the National Safety Council's Committee on Winter Driving Hazards has completed a survey of the equipment on hand, equipment ordered and equipment not available to fleet operators.

The survey was conducted among 103 fleets operating in 48 states and the District of Columbia. Their headquarters are in 80 cities and they equip more than 16,580 vehicles with special items of winter equipment.

A summary of reports from these fleet operators indicate that many are going to be short of some items of equipment which are used normally, and this, in turn, means that their drivers are headed for trouble unless they compensate for shortage of equipment by extreme care and caution through the winter months.

Normally the fleets covered by the survey use the following equipment on all or some of the vehicles in their fleets:

Equipment	Per Cent of Fleets Using
Windshield wipers	100
Heaters	91
Tire chains	91
Radiator anti-freeze	79
Fans, grill covers or winter fronts	56
Shovel	51
Tow rope or chain	40
Salt, cinders or sand box	26
Other equipment in use by a small number of fleets: special tread tires, frost shields, stoves, and electric sanders.	

Purchase orders for winter equipment were placed by 86 per cent of these fleets last year and 20 per cent of this group did not receive all equipment ordered. Shortages were reported by fleets with headquarters in 18 cities of 14 states. These shortages included chains, anti-freeze, heaters, defrosters, fans, stoves, grill covers, shovels, frost shields, and ropes.

The most widespread shortages were of tire chains and anti-freeze. Fleets with headquarters in seven cities in six states could not obtain chains, and anti-freeze was unavailable to fleets in five cities in five states.

Stock room supplies of winter vehicle

equipment were reported adequate for the coming winter by 46 per cent of the fleets, while 42 per cent reported that orders already had been placed. About 81 per cent of the latter group have not received all the equipment ordered. Shortages of particular devices were reported from fleets in 16 cities and 12 states. Unavailable items in these cities were: chains, anti-freeze, fans, heaters, defrosters, thermostats, winter fronts, grill covers, and rope. The most predominant shortages still are of chains and anti-freeze with eight cities from seven states reporting chain shortages and nine cities in eight states reporting anti-freeze shortages.

Fleets in 11 cities of eight states reported that particular devices unavailable last winter in their areas are still unavailable. This applied mainly to anti-freeze and chains, the former being short both last winter and now.

Fleet operators also were questioned on the reconditioning of used special winter equipment. It was found that 79 per cent of them are at present taking steps to put equipment in shape for next winter's use.

Steps being taken include: surveying and inventorying the condition of their

winter equipment; overhauling (repair, cleaning and assembly) chains, heaters, heater fans, motors, stoves, fans, winter fronts, windshield wipers, floor mats, grill covers, heater hose, tire chains, tow chains, shovels, and defrosters; draining and straining last winter's radiator anti-freeze liquids for use this coming winter; storing all winter equipment in a clean and orderly manner for easy distribution to vehicles when winter is imminent.

An important step in lengthening the life of equipment is driver instruction in the use and conservation of such equipment. This was done last winter and will be done again this winter by 84 per cent of fleets which reported. The instructions issued included:

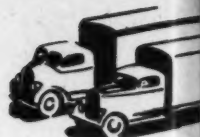
Chains—Minimize the wear of chains by using them only when necessary. If chains are applied too tight, they gouge the thin sidewall of the tire. They should not be anchored to the tire or tightened by tools. Chains should be put on "hand tight" and tires never should be deflated in order to tighten the chains. Never spin the wheels, avoid locking the brakes when stopping, be careful of car tracks and sudden directional changes

(Continued on page 70)

MAINTENANCE WORK for meeting winter driving hazards should be started early. Winter street and highway transportation hazards and difficulties cannot be permitted if military and civilian needs are to be met in 36 of the 48 states that are in the snow belt.



Motor Cargo ...



Truck Production Program Increased; 123,492 New Units Authorized by WPB

The War Production Board has announced a four-fold increase in the 1944 civilian truck production program, and implemented this decision by making the program a "must" with priority ratings equal to aircraft, and high octane gas.

Figures released by R. L. Vaniman, director, Automotive Division, show that total production of all types of commercial trucks under the new program will be stepped up from an already authorized 33,852 to 123,492 units. This compares with the normal pre-war yearly production of approximately 700,000 vehicles.

To ensure proportionate deliveries to all claimant agencies, both for civilian and military use, all requirements for trucks have been pooled. In certain instances new or expanded facilities will be provided to handle the enlarged production program.

It was emphasized that the over-all 1944 truck production program also includes the requirements for construction and farm machinery, general industrial equipment and other uses which may require the same general type of axles, transmissions and engines as trucks. A certain portion of the manufacturing facilities for these critical components will be reserved for the production of replacement parts for civilian use.

The trucks to be produced under the revised program will consist of 92,057 mediums, ranging in gross vehicle weight from 9000 to 15,999 lb.; 21,030 light heavies, ranging in weight from 16,000 to 24,000 lb., gross vehicle weight and 10,405 heavy trucks, ranging from 24,001 lb. up, gross vehicle weight.

"Generally speaking," Mr. Vaniman stated, "the output of the first six months of 1944 will be limited to presently existing facilities, due to the lead time required. To accomplish the entire program it will be necessary to provide a substantial expansion of facilities which will be available for the increased production called for in the second half of 1944."

Maintenance Equipment Regulations Tightened

The War Production Board has tightened regulations controlling the production and distribution of automotive maintenance equipment through an amendment to Limitation Order L-270.

Permissive production of a long list of maintenance equipment will be in-

Program Called Inadequate

Many equipment manufacturers and truck operators consider the increased truck production program authorized by WPB as inadequate. Operators, however, are gratified that civilian truck construction has been given a high priority rating, and that production will be increased from 33,852 to 123,492 units.

Chester G. Moore, chairman of the Board, Central Motor Freight Assn., Chicago, and of the national war planning committee, American Trucking Assns., in an interview carried by the Chicago Journal of Commerce stated that his committee would continue to press for enough new equipment and parts to "really keep 'em rolling during 1944." The present program, he said, while helpful is inadequate to meet next year's essential requirements.

Increased while at the same time distribution of these items will be more closely controlled regardless of how they are to be used. Under the terms of the new order manufacturers can make delivery of these items only on ratings assigned by specified forms as set forth in the order.

ODT Forbids Extension Of Routes or Deliveries

All truck operators in the nation have been forbidden by Joseph B. Eastman, director, ODT to inaugurate new truck operations or extend present routes or delivery areas without obtaining prior approval of the ODT.

The amendments forbid any motor carrier to increase his mileage by extending his operations into areas or over routes not now served by the carrier.

All truck operators performing over-the-road, local cartage and pick-up-and-delivery operations are affected. Any carriers, private, contract or common, who desire to extend operations or establish new ones must obtain ODT approval.

May Change Name

Corporate reorganization, possible absorption of other motor freight lines, and a change of name are said to be possibilities in the near future for Lecrone-Benedict Ways, Inc., Detroit, Mich. John Bridge, formerly head of the Interstate System, is president of the Lecrone-Benedict organization, which sometime past absorbed Great Western Transport. Lecrone-Benedict Ways, Inc., is a national motor freight carrier with terminals in Ohio, West Virginia, Indiana, Illinois and Michigan.

Clearing House for Freight Bills Set Up By 32 San Francisco Trucking Operators

SAN FRANCISCO—Thirty-two common carriers from the San Francisco Bay area have established a clearing house on freight bills which takes all responsibility for paper work and collection of such charges out of their hands and reduces paper work for shippers as well.

Gordon Healow, managing director, National Transport Clearings, was in San Francisco in November supervising the setting up of the San Francisco Transport Clearings organization, which has just been incorporated under the laws of California. Transport Clearings is owned and operated by its member carriers through a board of governors elected by the members.

Following incorporation and filing of articles, the board of governors was announced by Mr. Healow as follows: James Coughlin, California Motor Express, chairman; Jos. Robertson, Highway Transport, vice-chairman; Ward G. Walkup, Merchants' Express Corporation, treasurer; also, J. A. Gritsch, Ore-

gon-Nevada-California Fast Freight; M. D. Savage, Savage Transportation Co.; F. G. Ward, Vallejo, Express; Harold Frasher, Valley Motor Lines; Roy Thompson, secretary-manager of the Truck Owners' Association of California, is the executive secretary. Approximately 32 common carriers from the Bay area make up the membership. Any freight carrier who can meet certain requirements is eligible to join the organization.

The plan calls for a method of operation whereby all the freight bills of member carriers are submitted to the Clearings office each day, and are immediately paid in full. All carrier bills are then sorted out as per debtor shippers and submitted to such shippers at one time, debtor making payment at once in a single check. The system simplifies paper work for all concerned. All bills are sold without recourse. However, executives of the plan say there is very little

(Continued on page 71)

STAND BY TO REFUEL

Tank it up and take it away . . . Navy routine, in which Autocar tank-trucks are a stand-by . . . the pause that refuels P-T boats, bombers, and fighters. Other Autocar special-purpose vehicles are also "stand-bys" with the Navy, the Army, the Marine Corps, and the Air Forces . . . heralds of increasingly finer Autocar trucks to come. In the meantime, Autocar Factory Branches stand by to help all Autocar owners everywhere.

AUTOCAR

MANUFACTURED IN ARDMORE, PA.

SERVICED BY FACTORY BRANCHES FROM COAST TO COAST



Buy More and More
WAR BONDS

ation has
Eastman
new truck
routes of
ing prior

ny motor
ge by ex
as or over
carrier.
ing over
k-up-and
ed. Any
common
ations or
ODT ap

ssible ab
ines, and
be possi
Lecrone
ich. John
interstate
Lecrone
sometime
transport
is a na
ch termi
diana, Il

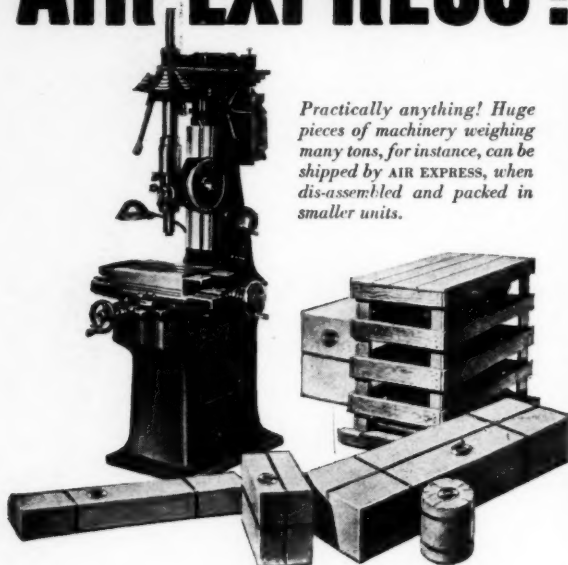
ators

Freight
ortation
Express
Lines
er of the
ifornia
approxi
the Bay
Any for
tain re
organ-

opera-
of men-
Clear-
mediately
re the
ers and
e time
e in
ies pa
ill's are
execu-
y little



What can go by AIR EXPRESS?



Practically anything! Huge pieces of machinery weighing many tons, for instance, can be shipped by AIR EXPRESS, when dis-assembled and packed in smaller units.

IF your shipment can go by rail, it can usually go by AIR EXPRESS, providing it fits into an Airline Transport (when oversized, the shipment can often be dis-assembled into smaller units).

No special packing is needed, either. In fact, the careful handling so typical of AIR EXPRESS eliminates the need for expensive cases or massive crates. Consequently when you pack for AIR EXPRESS, *pack compactly*—thus reducing weight and shipping cost. And for fastest delivery—*ship when ready*—as early in the day as possible.

This 3-mile-a-minute service is available direct to more than 350 U.S. cities and to scores of foreign countries.

AIR EXPRESS RATES REDUCED

As a result of the great volume of Air Express traffic created by wartime demands and the increased efficiency developed to satisfy these demands... Air Express rates within the United States have been substantially reduced, in some instances as much as 12½%, depending on the weight of the shipment and the distance it moves. Consequently, shippers nationwide are now saving an average of 10½% on air cargo costs.

ASK for our new 1943-44 CALENDAR-BLOTTER. Write to Dept. PR-13, Railway Express Agency, 230 Park Avenue, New York 17, N. Y.



Phone RAILWAY EXPRESS AGENCY, AIR EXPRESS DIVISION
Representing the AIRLINES of the United States



Single Responsibility Unified Service for.. POOL CAR DISTRIBUTION PACKING & CRATING CARTAGE & STORAGE

AT THE FOLLOWING POINTS

BILLINGS, MONT.	OAKLAND, CAL.
BOISE, IDAHO	PENDLETON, ORE.
DULUTH, MINN	PORTLAND, ORE.
EUGENE, ORE.	SAN FRANCISCO, CAL.
HELENA, MONT.	SEATTLE, WASH.
KLAMATH FALLS, ORE.	SACRAMENTO, CAL.
MARSHFIELD, ORE.	SPOKANE, WASH.
MEDFORD, ORE.	YAKIMA, WASH.

FOR INFORMATION... WRITE MAIN
OFFICE CONSOLIDATED FREIGHTWAYS
TERMINAL SERVICES DEPARTMENT
P.O. BOX 3618, PORTLAND, OREGON
or to points listed above

Fast Motor Freight Transportation
for the Nation

now ONE MAN does the WORK of THREE with **ANTHONY** **TAILGATE** HYDRAULIC **LOADER!**

CAPACITIES 750 LBS. to 1500 LBS.

- ★ Solves Manpower Shortage!!
- ★ Pays for Itself!!

MOUNTS ON TRUCKS
NOW IN SERVICE
OR ON NEW TRUCKS



With an Anthony "Tailgate Loader" one man easily places heavy awkward crate on tailgate. . . .

. . . by hydraulic lift, controlled by one lever, one man raises heavy, awkward crate to floor level. . . .

Tailgate automatically stops flush with body floor, permitting man to easily and safely load heavy, awkward crate.

- ★ SAVES MANPOWER! One man now does what three or more formerly did.
- ★ CUTS LOADING AND UNLOADING TIME! Trucks are loaded and unloaded faster — keeps them on the move.
- ★ REDUCES PERSONNEL ACCIDENTS! Loads are lifted to body or lowered to ground by powerful hydraulic hoist mechanism controlled by one convenient lever.
- ★ REDUCES ACCIDENTAL DAMAGE TO VALUABLE MERCHANDISE! No skids, chains or cables to break or slip. Minimizes your damage losses.

Write or wire today for complete information. You'll be surprised at the low price.

Address: Department J-72



ANTHONY COMPANY, INC.
STREATOR, ILLINOIS

Manufacturers of Anthony Hydraulic Hoists and Bodies

WITH an attendance of nearly 400, the second annual air cargo meeting Nov. 8 and 9 at the Knickerbocker Hotel, Chicago, Ill., under auspices of the Chicago Section of the SAE, emphasized the growing importance of air transportation and the widespread need of better ground handling facilities, particularly with respect to more efficiency in the use of basic materials handling equipment.

The opening session, Nov. 8, under the chairmanship of George A. Page, Jr., director of engineering, Curtiss Wright Corp., was concerned entirely with air cargo plane design. E. C. Wells, chief engineer, Boeing Aircraft Co., discussed some economic aspects of commercial use of converted military aircraft, and Carlos Wood, chief, preliminary design, Douglas Aircraft Co., spoke on design considerations of cargo airplanes. Both read papers of a technical nature.

Transition Aircraft

"With competition from new equipment a certainty within one or two years after cessation of hostilities," Mr. Wells stated, "it is apparent that the airlines must establish with care their policies with regard to purchase, conversion and depreciation of 'transition' type aircraft."

"Immediately after the war," Mr. Wood said, "a large part of air cargo probably will be composed of non-local mail together with a reasonable amount of express. In the period following this immediate phase it may be expected that air cargo rates will be reduced as suitable cargo aircraft become available. When this occurs, then business may be developed in the transport of perishables and items normally carried by l.c.l. freight and motor truck. When air cargo is predominantly of this latter type of goods it can be said that it has come of age."

Some Possibilities

"If air cargo rates can be reduced to reasonable values," Mr. Wood added, "this business not only can be big business, but can profoundly affect the prosperity of our country and the rest of the world. We believe that this rate reduction not only is possible but necessary as air cargo can be a powerful instrument of trade and commerce that may be used to promote and preserve world peace."

The second session was devoted to air cargo operations. J. A. Herlihy, executive vice president, United Air Lines, presided. W. L. Brintwell, president, Aircraft Repair, Ltd., spoke on the use of air freighters in areas not served by other adequate means of transportation in northern Canada, and J. G. Borger, staff engineer, Pan American Airways system, read a technical paper on payload vs. operating speeds in air cargo transport operations.

Air Freight in Canada

"Canada," Mr. Brintwell said, "was one of the first countries to use air freighters, because of the vast areas of unsettled country and because of the fact that the only existing means of transportation was either by canoe in

SAE Air Cargo Meeting

CONSPICUOUS among the opinions expressed by engineers, airline executives, transportation officials and equipment manufacturers at the second annual air cargo meeting sponsored by the Society of Automotive Engineers at Chicago last month were the following:

Shortly after the war air cargo rates will be reduced as suitable cargo aircraft become available.

Post-war air cargo possibilities are not to be measured in terms of pre-war tonnage at pre-war rates. Its market will be found in the traffic born of future developments in our economy, many of which are now well under way.

After the war we shall be doing global shipping. New and revolutionary packaging materials and methods will enable airplanes to carry cargo not now thought possible.

The development of materials handling equipment specially suitable for air cargo must be brought about by the coordinated planning and joint efforts of equipment manufacturers and airline operators. A fundamental method or system of handling air cargo on the ground will have to be evolved and standardized for maximum efficiency and economy of operations.

More extensive use of fork trucks and unit pallet loads to reduce unnecessary handling at airports was recommended.

Greater coordination between air and motor carriers was urged.

An educational campaign on the part of the airlines to make shippers more air conscious and to advise them on new methods of packaging for air cargo was suggested.

Helicopters were declared to be still in an early experimental stage, about where the airplane was in 1904.

Our technologies of production and distribution will be very different in the future, it was declared. Any estimate of air cargo which neglects this fact must, of necessity, be far wide of the mark.

o o o

the summer or by dogteam in the winter.

"New mining areas were opened up and with continued expansion large communities were developed and in many instances in northern Ontario and Quebec railway and road transportation resulted. Thus, the air freighter was the means of opening up new country, creating new wealth and productive jobs for more people.

"The average cost of operating a medium type air freighter is 0.3c. per lb. mile. It has been proven over a period of time that the use of air freighters is definitely cheaper, taking all things into consideration, than by means of canoe in the summertime or dogteam in the winter time. Thus, the entire economy

in northern Canada has been changed by the use of the air freighter."

Future Prospects

Speaking of the future, Mr. Brintwell said:

"The aviation industry as a whole is thinking entirely of large passenger aircraft for global air routes. Few realize the tremendous importance of the development of an air freighter to operate from developed combination airports into the hinterlands of the world.

"I believe much thought should be devoted to the design and construction of this type of aircraft as its operation all over the world, will act as feeder lines to the global air routes. These new type

air freighters will materially help to solve the economic problems of the bigger and better world for which the United Nations are fighting."

Air cargo handling problems featured the evening session of the first day's meeting. M. D. Miller, manager, air mail, express and freight, American Airlines, presided.

In discussing some of the basic fundamentals for packaging air cargo shipments, J. H. Macleod, vice president, Hinde & Dauch Paper Co., stressed packaging as the first of the major shipping factors for air cargo.

Packaging

"Since air cargo is a living reality and is no longer to be classified as wishful thinking, and since it is destined as the last word in modern transportation, with unlimited possibilities," Mr. Macleod said, "it will pay air shippers to analyze and investigate the packaging materials available for use, and capable of guaranteeing the safe arrival of their merchandise."

"Among all the available materials suitable for packaging air shipments, there is no other one that can fill the same wide range of uses, there is no other one that meets air cargo requirements so completely, as the corrugated box. I'd like to direct to your attention that the airplane for air cargo transportation and the corrugated box for packaging air shipments have much in common. Many of the same basic construction and service principles apply to each. For instance, both are designed to provide the greatest amount of load-carrying strength with the lightest construction weight possible; both have adopted arched construction to eliminate excess weight and to add strength and ruggedness; the airplane promises quick, and safe delivery, the corrugated box assures speedy packaging and sealing, and its durable, lightweight construction means safe arrival at lower transportation costs."

"A war-time packaging requirement that has gained prominence due to the necessity of shipping materials to the Aleutians, Alaska, Africa and the south Pacific, deals with methods for temperature and humidity control, the elimination of corrosion, mold formation and insect infestation. These problems aren't as serious as they appear at first. They are easily and simply overcome by using any of the new bag packaging or overwrapping materials recently developed. The contents of the shipping box can be enclosed in one of the special materials. In both cases the packages are heat sealed to guard against the problems I have mentioned. Some of the prominent materials used for bag packaging or overwrapping are special and laminated papers, laminated cellophane bags, and kraft bags and papers. After the war we will be doing global shipping and these special materials will provide excellent advantages for this super service."

Ground Handling

In discussing air cargo handling equipment, H. W. Anderson, vice president, aviation division, The Whiting Corp., stressed the importance of a thorough study of all the problems involved.

60 Minutes

THERE is no question about the future of air cargo. Its possibilities have been amply demonstrated by the Army Air Transport Command. It is possible to carry most anything by air. Anything that you can get through the door of an airplane is air cargo.

The time consumed in loading operations, however, will have to be reduced. There is altogether too much time wasted in ground handling.

It takes 60 minutes to place 1500 lb. into a transport plane today, and the same amount of time to unload it. That is the average figure for the Air Transport Command, which operates over 80,000 miles of world airways.

A basic time study is needed, and new and more efficient ground handling methods will have to be devised so that loading and unloading time can be reduced to a minimum.

Col. H. B. Harris,
Assistant Chief of Staff,
Air Transport Command,
Army Air Forces

"From the great number of loading methods in use today," Mr. Anderson said, "it is evident that there is little harmony of opinion on what constitutes a proper loading method. In fact, it is quite safe to say that there is nothing in this field that has yet shaken down to anything universally acceptable. It is logical to assume that the development of more or less uniform equipment must

Shipping by Air

AIR cargo is not a thing of the future. Air cargo has already proved itself. People have found that shipping by air has very marked advantages over surface transport in many situations.

In certain respects, the airlines today are in a position somewhat similar to that in which the railroads found themselves in 1835. In that year, an engineer's report stated that because of construction and maintenance costs, and the weight limitations of equipment, the railroads would never be likely to handle more than passengers and light express freight.

My professional crystal gazer tells me never to underestimate the ultimate potential of something that has been tried and found successful and where great efforts are being made to expand the field of success.

The great objective of air cargo is not to be measured in terms of pre-war tonnage at pre-war rates. Rather, its greatest market will be found to lie in the traffic born of future developments in our economy, many of which are now well under way.

Competition for existing traffic provides the market mechanism by which air cargo can prove itself as a safe, swift, flexible, and economical means of transport for an increasing number of shippers with aoids of all kinds to sell. Once proved on a large scale a very great future lies before it.

Hon. Wm. A. M. Burden,
Special Aviation Assistant
to the Secretary of Commerce

be postponed until the military operations cease to dominate the cargo picture, then we can devote all of our time to commercial operations and unify our thinking.

"The problem is great and the variables numerous. Many variables are probably not even recognized. Before any solution can be found these variables must be isolated, then formulated. Who is going to do this? Who is going to write the specifications for the right air cargo loading method and equipment? Neither the equipment manufacturer nor the airline operator can do this alone. Between them come the aircraft and airport designers.

Coordination Essential

"These four in concert must make the analysis and develop loading methods which will result in efficient operations to the air carrier. It would be ideal to have some form of proving ground where these four interests could meet and study the problem in its entirety. In outlining the problems from our standpoint, as manufacturers of equipment, our treatment of the analysis of air cargo handling problems is made with perhaps a different outlook or with a different viewpoint than either the aircraft manufacturer or the airline operator. This does not mean that we are ignoring the facilities of either the operators or the airplane manufacturers but rather are studying their viewpoints and attempting to take advantage of our past experience in materials handling problems to find an efficient solution of the present problems.

"Experience gained through our studies and development work will enable us to collaborate more effectively. To begin an analysis, the equipment manufacturer must have a working knowledge of the flow of shipments from shipper to consignee. We are not concerned with the pick-up and delivery phase of the flow except as to how shipments are delivered to the air terminal. Adequate facilities must be provided for receiving originating cargo into the terminal and for delivering incoming cargo to trucks. Here, with respect to terminal design, a collateral engineering service is necessary to assist in closing the gap between the terminal and the airplane so that equipment for transferring cargo between the two may fit in with one as well as with the other. This presents a real problem because terminal buildings and airport layouts will not be identical for any two airports. When we visualize several different types of airplanes operating to and from these airports, the picture is further complicated.

Basic Method Needed

"That, however, does not preclude the possibility of applying identical cargo systems with similar equipment at different airports. It is our opinion that the development of equipment for the solution to the problems encountered in handling cargo must be predicated on the adoption of a fundamental method.

"If we desire to be helpful, we cannot permit ourselves to freeze on any one solution. Naturally, there will be a tendency to promote equipment that is on hand. However, the advantages that might accrue through standardization should not be permitted to stifle further developments."

In the discussion that followed it was pointed out that the Freight Container Bureau attempts to solve packaging problems for the railroads, and does educational work among shippers. Something similar, it was said, is needed for air cargo. It was also emphasized that the airlines owe it to themselves and to shippers to educate potential users of air transportation on the most suitable methods of packing for air shipment.

Fork trucks and unit pallet loads could help materially in doing away with much unnecessary handling, it was stated. Trailers with elevating bodies and high lift hoist trucks were also recommended.

Air Cargo Pick-up Service

At the session devoted to air cargo development problems Russell Forbes, vice president and general manager, Air Cargo, Inc., presided. Dr. John H. Frederick, air cargo editor of *DandW* and professor of transportation, University of Texas, advocated coordination of air and surface transportation. Many of the ideas expressed by Dr. Frederick have appeared in his monthly articles in *DandW*. He stressed the need of airport development, experimentation with handling equipment with the aim of standardization of handling methods at airports, and better coordination between air and motor carriers.

"It is unlikely that the airlines will want to go into the motor carrier business in order to supply pick-up and delivery system," Dr. Frederick said. "This means that arrangements will have to be made with ground transportation organizations such as truck operators or the continuance, perhaps on a modified basis, of the Railway Express Agency set-up. Probably the greatest opportunity ever presented to the motor carrier industry is that of coordinating ground and air cargo transportation; yet to hand over this service to these operators might have decided disadvantages from the airline viewpoint."

For Example

"For example, many truck organizations are not now equipped to handle the functions of air cargo classification, routing, preparation of waybills, bills of lading, etc., and it would involve a considerable expense on the part of the airlines to train the personnel of these local operators in their various duties concerned with the air cargo business. Moreover, they are not equipped to handle claims for damage and loss, and it would involve setting up new departments to take care of such matters properly. There is also the fact that to use existing motor carriers might necessitate an airline, or the airlines as a group, entering into contracts with many independent trucking companies in order to have complete national coverage. This might make for needless confusion in the administration of inter-company affairs and a difficulty in standardizing services."

"On the other hand, there are decided advantages offered by the truck operators. Their regular operations would not be directly competitive with the majority of air cargo traffic. Air and truck operations are frequently complemen-

1944 Meeting

THE third annual air cargo meeting sponsored by the Society of Automotive Engineers will be held Dec. 4, 5 and 6, 1944 in Chicago, at a hotel to be selected during the coming year.

W. W. Davies, general chairman, SAE air cargo program committees, announced the dates of next year's meeting at the close of the banquet which concluded last month's representative gathering of engineers, airplane executives, transportation officials and equipment manufacturers.

tary, and it would be to a truck operator's interest to develop long distance air cargo traffic at the off-line points where he had stations and the airlines would receive the utmost cooperation in other ways. Also, the airlines would be in an excellent position to bargain with the truck operators. In many instances there are several motor truck carriers operating in the same territory, and they can be made to bid against each other for the business. In this way the airlines will probably be able to gain more favorable contracts than by some other method. Truck operation has been a competitive business, and the traffic has been built up partly by giving quick and personalized service. Therefore, air

Sales and Pick-up

A SALES and advertising policy to sell air cargo transportation services to shippers and receivers of high-class commodities should be in the making now. In this policy the airlines and air cargo should be completely divorced from the railroads and rail express.

The airlines will never come into their own as air cargo carriers as long as a substantial part of their advertising and sales work and a very vital part of their coordinated service—ground pick-up and delivery—is performed by a railroad dominated organization. While this situation continues air cargo will be railroad, not airline, business.

It is for this reason that I believe the airlines must start laying plans to handle their own business and to do their own selling of air cargo or they might as well never expect to do it. The longer the railroads have control, as they now seem to have, the harder it will be to break away.

Air and rail services are competitors and will continue to be, for certain kinds of traffic, and one can hardly believe the Railway Express Agency is going to operate its present air express division in such a way as to adversely affect the returns the railroads receive. It is also hard to believe that coordinated air cargo transportation under the control of a railroad dominated agency will ever be pushed as actively, or that its services will be promoted as effectively, as they would be by those interested in seeing air transportation develop to its maximum extent.

**Dr. John H. Frederick,
Air Cargo Editor, D and W,
Professor of Transportation,
University of Texas**

cargo will perhaps get a more efficient handling service from the standpoint of speed and accommodation to the shipper and receiver of such cargo if the coordinating agency is a motor carrier.

Railway Express

"The other possibility for pick-up and delivery organization is a continuation of the present or a modified contract with the Railway Express Agency. This has certain advantages since this one company has some 23,000 offices spread over the nation, is centrally controlled, and has a well-developed organization for handling inter-office affairs. It has been performing this type of work for the last hundred years, and should know how to do it. It has also been handling air express since 1935.

"There are, however, several disadvantages of continuing the contract with the Railway Express Agency. For example, when air cargo offices are combined with Railway Express offices, there is less likelihood of over-the-counter sales. There will be little if any incentive on the part of the express company employees to sell air transportation to the drop-in trade. The Railway Express Agency's office will be the receiving center for all shipments requiring speed, and all packages brought in will be likely to be sent by rail unless the customer specifically states that he desires air cargo service.

Air vs. Rail

"As long as the rail agency handles the shipments, just so long will the public associate the speed of air express with the speed of rail express. This is important, as it may mean the difference between really developing an air cargo business so that it is used by the general public in shipping miscellaneous articles and in never having it grow beyond present proportions. One part of the sales promotion and advertising policy of the airlines must be to make people air-minded and to make them think of air transportation when they ship their products. A large portion of these expenditures will be wasted if air express ground service is combined with rail."

Disagreement Expressed

E. J. Foley, assistant to the vice president of engineering, American Airlines, Inc., expressed his disagreement with Dr. Frederick on this matter.

"The pick-up and delivery agency," Mr. Foley said, "is a characteristic of air cargo. A most logical first subject for consideration is the Railway Express Agency to which Dr. Frederick has made references. We cannot express agreement with him on the points which he has made because we are of the opinion that he has exaggerated certain possible tendencies and in so doing has created certain foreboding shadows, which, we believe, are nothing more than shadows. We admit that some of the tendencies existing in rail express of which he speaks are actually there, but they are tendencies, not permanent, insoluble difficulties."

"We think it would be illogical summarily to dispense with a relationship which offers certain definite advantages. We hold no brief for Railway Express

(Continued on page 72)

Some Fundamental Principles of Air Cargo Equipment

EXPERTS are confident that out of the war will come an air cargo plane that will enable our airlines, when peace returns, to establish a network of cargo routes covering the entire world . . . For air cargo transportation we may expect original and specific designing plus the application of mass production to a degree not yet found possible in turning out war planes.

EXPERIENCE with air cargo during the past two years clearly indicates that no single type of plane will handle the whole job and no one system will solve all of the problems in the field. It is pretty certain, however, that in the immediate post-war period the airlines will, for very obvious reasons, be operating the three or four cargo types now being produced in quantity for the armed forces. Also that, particularly on the feeder lines, they will be operating combination passenger-cargo planes substantially larger than the DC-3s which have been standard for some time. The airlines will continue using such combination planes until air cargo develops sufficiently to let newer types of exclusive air cargo planes pay their way, or until these newer planes can be operated at a lower cost, thus attracting sufficient traffic.

Bombers Not Suitable

There has been widespread popular belief that many wartime planes, notably the big bombers, will be suitable for conversion to cargo carriers when the war is over. But those experts in the industry who have given most thought to the subject hold that cargo planes will and should be designed specifically for the job.

Among those who have expressed an opinion on the unsuitability of converted bombers, particularly for cargo, are Maj. William M. Sheehan, chief, air section, Army Air Forces' traffic and transportation division, and Harry Woodhead, president, Consolidated Aircraft Corp. They point out that military fuselages are small and highly specialized for war purposes and that bombers which can carry 20 tons of explosives would have to have a fuselage much larger in diameter to carry 20 tons of normal cargo.

Bombers have been designed for but one purpose; to carry a heavy load a maximum distance at high speed. They aren't intended to operate economically but "to get there first" which means tremendous fuel loads, and high speeds, both features not necessarily involved in a plane for air cargo transportation.



By JOHN H. FREDERICK

Air Cargo Editor

o o o

As Maj. Sheehan has pointed out, the bomber load consists of a large mass of potential destruction condensed into the least possible size. Bombers are designed to just fit around the bomb load with as little structure as possible left over. In fact, on a bomber, a good part of the fuselage serves for no other purpose than to extend the empennage far enough back to provide stability and control in flight. The bomber, taking advantage of the "load-dropping nature of its mission" concentrates its load close to the plane's center of gravity so that once the load is dropped the plane suffers the least possible change in longitudinal balance. The bomber has neither need nor room for general cargo and hence no balance adjustment to control it. Air cargo on the other hand must be spread about in a plane to permit handling in flight, load segregation by destination and the like.

Economic Aspects

The economic aspects of air cargo are very important in future planning and are subjects on which all plane manufacturers are spending as much time as they can afford during the war. Such studies will take their full energies, in many instances, as soon as peace is declared as everyone concerned is extremely

anxious to determine actual costs of operation in order that some estimate of the probable amounts and types of traffic may be estimated. Costs and rates naturally go together.

Manufacturers of planes as well as the airlines have certain general methods of calculating costs, but unfortunately the costs themselves are extremely sensitive to a large number of variables, all of which will have to be considered very carefully in selecting equipment for air cargo. Among these variables are such items as weight, design, speed, payload, overhead, and similar factors.

Weight

Weight is one of the most important variables and extreme care must be taken that any weight data used by a manufacturer or operator is accurate. This is so whether such data concerns weight empty, the weight of the crew and equipment, the necessary weight of fuel, or the allowable gross weight of the plane. The gross weight is determined by regulations imposed, and to be imposed, on cargo plane operation by the Civil Aeronautics Authority. The weight empty or minimum flying weight, either one, depends not only on the basic design of the plane, but on legal requirements which specify such things as structural load factors, instruments, radio and similar fixed equipment.

The fuel weight required depends not only on the fuel consumption of the engine, but on the policy of the operators concerning fuel reserves for emergencies. It will be realized that any decrease in the allowable flying weight or any increase in either the minimum flying weight or the fuel weight will cause a direct decrease in the amount of payload to be carried.

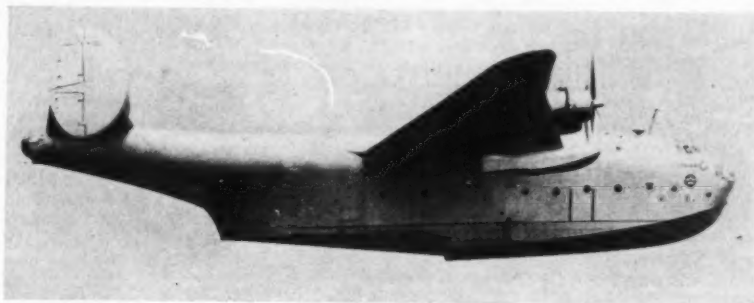
It is interesting to note that, in the last 10 years, while gross weights and speeds of planes have steadily increased, the general trend in efficiency or load carrying ability has been downward. In other words, payload has very largely been sacrificed to more than doubled speed and gross weights have increased nearly five times.

Any design of cargo planes must keep in mind the extreme importance of weight as mentioned above and balance any incurrence of weight penalties against possible advantages to be obtained by design for aerodynamic cleanliness, ease of cargo handling, reliability of operation, ease of maintenance and long life of the flying equipment.

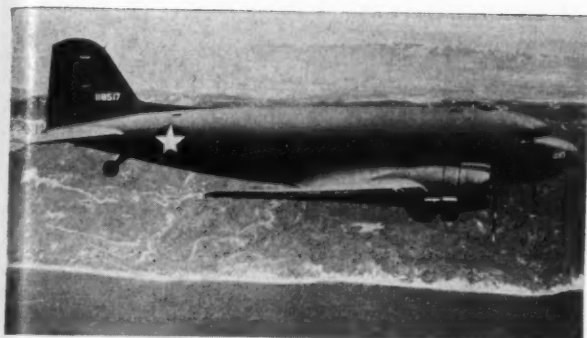
It has been found that extremely high

operating speeds often cause a serious increase in operating costs due to increased fuel requirements, higher maintenance costs, and reduced engine life. It will often be found that short range operations should be operated at considerably higher flight speeds than long range operations. This factor will be very important in considering equipment to be used on the feeder lines.

True economy in airline operations is more likely to be found in lowering cost of operation per pound-mile flown than in miles flown per hour operated. For this reason, slower planes designed to give greater lift and additional cargo capacity, are more economical than planes of limited cargo carrying ability and higher speed. As long as air cargo services can bring any two cities in the



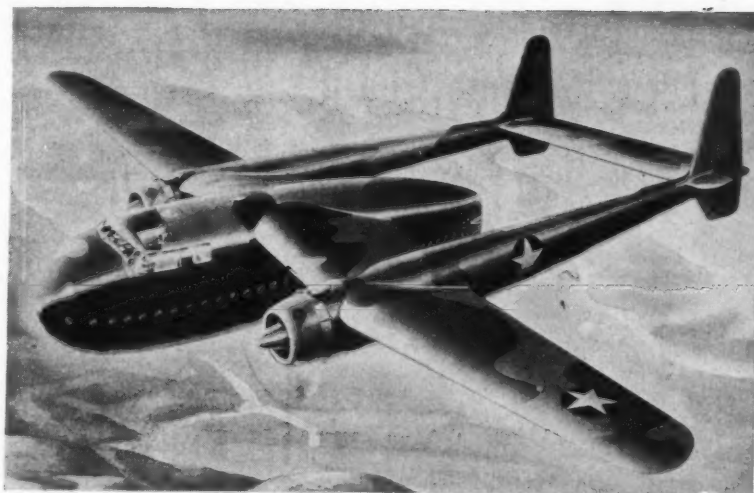
Courtesy Glenn L. Martin Co.



Courtesy Douglas Aircraft Co.



Courtesy Curtiss-Wright Corp.



Courtesy Fairchild Engine & Airplane Corp.

CARGO PLANES . . . Top: The Martin 170, known as "The Mars," is the largest flying boat in the world. The cubic contents of its hull is equal to that of a 14 to 15 room house. Planes of this size and larger can compete successfully in cargo-carrying efficiency with surface ships, because of the planes' greater frequency of operation . . . Left Center: The C-47 cargo carrier is a military version of the Douglas DC-3. Planes like this probably will form the equipment backlog for air cargo operations for sometime after the war . . . Right Center: The Curtiss C-46

Comando, largest twin-engine airliner now being produced, has done much to convince aeronautical engineers of the higher efficiency of large planes which can carry a higher percentage of load for the same proportion of horsepower . . . Lower: Fairchild's new all-metal cargo-carrying plane is designed to operate to and from airports of limited size and provides a number of new features for handling cargo. Details of its construction are still a military secret, but it is reported to have a cruising range in excess of 3,500 miles.

United States within one day of each other the maximum value of air cargo transportation will be attained with speeds that involve the least sacrifice of lift and space characteristics. To demand additional speed is but to keep up costs and delay the time when air cargo can really compete with surface transportation.

Maximum Utilization

On any airline it is important that operating plans be made in such a way as to use the planes a maximum number of hours per day as experience has shown that planes generally do not wear out, but get replaced because of the development of improved and more economical equipment. Maximum utilization will also tend to reduce fixed charges on equipment because of the smaller number of planes required for any particular service. It will also affect other items such as crew costs because of ground time en-route during which the crew must be paid. Other things being equal, the airline which keeps its planes in the air for the greatest number of hours, out of each day and night, will be the one making the greatest profit.

Payload

Economical operations must be so planned that the airplane will carry as near as possible its capacity payload at all times. It has been found that the cost of operation of a plane per hour remains essentially the same regardless

of the payload that is carried on a given flight.

Despite all attempts to change shipping habits, the greatest volume of shipments is still delivered to the airlines in the late afternoon and evening hours. If this is so in war time it will be even more the case in peace time when few plants will work 24 hours in a day.

Transcontinental and other long-haul airlines will schedule departure for any convenient hour of the night so long as they have full loads and can reach major terminals in time for early morning deliveries. Feeder airlines and other short-haul carriers will have to make several round trips per night, as full loads become available, provided they can attain quick turn-around and return loads at terminals as well as overcoming the problem of loading and unloading time at intermediate stops.

Overhead

This is one of the hardest factors to control but one which may seriously affect the overall cost of operation. Overhead in cargo transportation must include any costs incurred in ground pick-up and delivery, handling and accounting for cargo as well as the other necessary expenses always present in running a business, many of which will not always vary with the volume of business handled.

Apparently no limit in size has been reached in contemplated designs for cargo planes. The point seems to be not how large planes can be, but what is the most economical size. Special designs

emphasizing convenience of loading and low costs of operation per ton-mile have already been worked out by the manufacturers and undoubtedly these types will be multiplied.

Out of the War

Experts are confident that out of the war and military and naval experience in hauling men and supplies by air will come an air cargo plane that will enable our airlines, when peace returns, to establish a network of cargo routes covering the entire world and thus assume our rightful leadership in this field.

Another thing that war production has made clear is the possibility of assembly line production of aircraft. This method, however, will be even more important in the production of commercial planes than it has been for fighters, bombers and other war planes. The reason for this is obvious; war planes must have special flexibility in design so as to permit constant change and improvement, even while a single contract with a particular manufacturer is being filled, to meet service conditions as developed in the various war zones.

A point of skill has been reached by airplane designers which will permit of a commercial cargo plane design being definitely frozen for a considerable output thus gaining many more of the advantages of assembly line methods. For air cargo transportation, therefore, we may expect original and specific designing plus the application of mass production practice to a degree not yet found possible in turning out war planes.

Our Civil Air Patrol Constitutes World's Largest Home Guard

Over 75,000 volunteer airmen operate from 1,000 air fields in U. S., and have done some amazing emergency freight hauling and rescue jobs.

A REPORT on the activities of more than 75,000 volunteer airmen of the Civil Air Patrol who operate out of a thousand United States airfields and constitute the world's largest aerial home guard is obtainable from the Office of War Information. It makes informative and interesting reading.

The Civil Air Patrol, organized a week before Pearl Harbor on the initiative of America's private flyers, has grown from small beginnings to an outfit of such size and value that it was taken over by the War Department from the Office of Civilian Defense on April 29, 1943, and is now an auxiliary arm of the Army Air Forces.

Their numerous accomplishments include: Flights totaling over 20 million miles, the spotting of more than 150 submarines for the Army, Navy and Coast

Guard, the sinking of some submarines themselves, and off-shore patrol missions which brought rescue to crews of torpedoed tankers.

Today more planes are available for Civil Air Patrol assignment than the entire Army Air Corps possessed at the beginning of 1940.

Inland squadron members carry on their regular jobs and serve in their spare time. Qualified members may volunteer for tours of full-time duty on CAP operations such as Coastal Patrol, where many have signed up for the duration.

Flying their own planes, using their own brains, initiative, equipment and money, together with gradually enlarged Federal grants, the CAP has built up coastal bases from Maine to Mexico.

CAP authorities emphasize the fact

that it's the work of the inland squadrons which makes the Coastal Patrol possible. Without the inland squadrons, which have supplied trained personnel from 45 states, there could have been no civilian sub hunt.

These inland activities, some of them no less dramatic than the ocean work, have developed into a major war contribution, freeing Army pilots and planes for more urgent assignments. The overland flights use thousands of light ships of 90 h.p. or less. Flying low and slow, under 100 m.p.h., the little planes, some of which can operate on less than 5 gal. of gasoline per hour, are superior to twin or 4-motor craft for short-range, intensive reconnaissance or search. Nothing excels them in this respect except blimps. Skimming over tree-tops, threading their way with "local knowledge" through canyons to avoid climbing over mountains, slipping in and out of narrow valleys, landing on pastures, dropping supplies and messages to air-crash survivors, flood victims, lost hunters or marooned fire wardens is work for which the little planes are well suited. Once in Nevada when orthodox high-level aerial search had revealed no clue, they located an Army bomber crash by flying low in the

(Continued on page 72)

ling and
ile have
anufac-
pes will

t of the
perience
air will
l enable
rns, to
tes cov-
assume
eld.

tion has
assembly
method,
rtant in
es than
ers and
for this
special
nit con-
t, even
rticular
et ser-
e vari-

hed by
mit of
a being
le out-
the ad-
s. For
ore, we
design-
produc-
found
es.

squad-
Patrol
adrons,
ersonnel
been

t them
work,
r con-
and
ments.
nds of
Flying
e little
ate on
r, are
ft for
nce or
his re-
tree-
"local
avoid
ng in
mes-
d vic-
l fire
little
evada
earch
ed an
in the

Post-War Controls Urged for Air

Warnings that every division of the aviation industry faced chaotic conditions immediately after the war unless a program for the solution of post-war problems was speedily evolved were sounded by speakers at the industry's "first national clinic of domestic aviation planning," which convened in the Oklahoma Capitol, Oklahoma City, last month.

"Unless some planning is done now," Col. Edgar S. Gorrell, president, Air Transport Assn. of America, told the convention, "we will find at the war's end we are not ready and will have to depend upon improvisation instead of a program."

About 500 representatives of aircraft builders, operators of commercial airlines, instrument producers and others were in attendance.

Colonel Gorrell said the airlines had completed a survey showing that there were 821 commodities which were adaptable to air freight shipment. Bulk cargoes, he said, had been ruled out.

A Federal agency composed of representatives of the industry and of interested Government agencies should be set up to control disposition of surplus aircraft when the war ends, Wayne W. Parrish, editor and publisher of American Aviation told the convention. Unless control was exercised, aircraft manufacturers would be driven into bankruptcy, he warned.

Daily Air Service To Alaska Started

Daily plane service between the United States and Alaska was inaugurated Nov. 18, by Pan American World



Colorado Truck Operator Gets Right To Operate an Intrastate Air Route

Strange Cargoes

A strange assortment of items, ranging from canaries and live chinchillas to jewels, orchids and crankshafts, have been finding their way into holds of the "flying freight cars," now operating on regular schedules between New York, Chicago and San Francisco.

Much new information is being gathered, air line officials say, as to what high altitude flying does to such commodities as birds, flowers and animals. One shipment of canaries sang all the way from coast to coast, while the chinchillas reached their midwest, fur-farm destination without a casualty, which, the shipper reported, had never happened when the little creatures were transported by other means.

Among fresh flowers, chrysanthemums and orchids stand high altitude best, it is said. Sweet peas seem to expand in the clouds, but "pop" and wither when the ship drops down to land. Experiments are being conducted to overcome this, officials say. (Slawson)

Airways, an increase from the former twice weekly air transport service.

A highly important decision affecting the issue of who shall operate airlines, and the place that ground carriers may take in the picture in the future, as well as federal jurisdiction versus state rights, has been rendered by the Colorado Public Utilities Commission, which has granted S. N. Drum, a truck operator, permission to operate an intrastate air route between Durango and Denver, Colo., via Alamosa and Pueblo in the same state. The company may also operate an unscheduled service on call and demand between the points mentioned and Grand Junction, Montrose and Delta, Colo.

Service is to be started as soon as Mr. Drum can obtain equipment. He stated he has been assured of two planes, one a bi-motor and one a tri-motor, on which he expects delivery soon.

The Public Utility Commission in granting a certificate stated that the operator must comply with all rules and regulations of the Civil Aeronautics Board relating to safety and liability insurance requirements for common carriers of passengers by plane.

What action, if any, will be taken by the CAB is not certain at this time. Probably nothing will be done by the Board until operations are actually started. Three years ago when Canadian Colonial Airways started intrastate service between New York and Niagara Falls without a CAB certificate, nothing was done by the Board until the route had been in operation for some time. After investigation the CAB claimed that the company was transporting passengers originating from or destined to points outside New York State and was thus engaging in interstate commerce. Suit was filed by the Board in the New York District Court to require Canadian Colonial Airways to desist or obtain a certificate of convenience and necessity. Operations by the company were subsequently discontinued by consent decree.

It is generally believed that under the present law if Drum carries no interstate traffic, no action against him is possible. If, however, it is discovered that he is transporting passengers and cargo originating from or destined to points outside Colorado, it may be found that he is engaging in interstate commerce and is thus in violation of the Civil Aeronautics Act. It is reported that Drum will join with Ralph Burris of Durango and incorporate Colorado Airways Corp. for the operation of the routes in question. JHF.

Glider Freight Trains, 6,000 Airports, Are Predicted After War by Air Experts

A post-war picture of huge commercial aircraft, and air-trains with gliders as boxcars, all moving under semi-automatic control through a stratified airspace was drawn by leaders in the air-transport industry and Government authorities who met at Washington recently under auspices of the New York Institute of the Aeronautical Science.

It was predicted that in a short time all first-class mail would move by air, that a few years after the war 300,000 private aircraft would be in operation, that there would be 6,000 airports in the United States and that by 1950 as many as 20,000,000 passengers would be carried annually by air.

However, not for several years after the war ends will any but converted military aircraft, in addition to the present commercial planes, be available, and without improvement in ground transportation local air transport will not develop rapidly it was said.

William A. Burden, special aviation assistant to the Secretary of Commerce,

who made some of the foregoing predictions, thought it would be advisable to lay plans to handle 500,000 aircraft, civilian and military, by 1950. He described the new ultra-high frequency radio range evolved by the Civil Aeronautics Administration, which eliminates the effects of weather, static, fading signals and other defects of the present radio range.

The commercial possibilities, after the war, of the glider pick-up air-train developments originated by the late Richard du Pont were discussed by Grover Loening, consultant on aircraft for the War Production Board. He predicted that the air train would become one of the fundamentals of air transport in a few years. Gliders were the box cars of the air and their use would lend flexibility to air freight transport. The use of electronic controls for towing and landing would make flying in turbulent weather, at night or blind much easier. The use of the pick-up system would allow the use of shorter runways. Pick-ups could be made from farms or factories.

Distribution Worldwide

● The world is a neighborhood . . . No business prospers without prosperous customers. That is plain commonsense. The United States is going to need a lot of customers after this war is over.

—Vice President Wallace

EXPORTS OF 7 BILLION POSSIBLE AFTER WAR, TRADE EXPERTS SAY

Postwar exports from the United States aggregating \$7,000,000,000 a year and annual imports of \$6,300,000,000 are envisioned by experts of the Department of Commerce.

In the best prewar year exports reached a peak of \$5,200,000,000 in 1929. Thus, the postwar potential was seen at 36 per cent greater than ever before.

These figures are included in a report "foreign trade after the war," which was prepared by the department for submission at the recent national foreign trade convention in New York.

The report was prepared by August Maffry, chief of the international economics and statistics unit of the Bureau of Foreign and Domestic Commerce, and Hal B. Lary, assistant chief.

They cautioned that the figures were not advanced as a forecast, but were based on broad assumptions which project past relationships into the hypothetical postwar year of 1948.

"Foreign trade after the war" is a sequel to "markets after the war," which was issued by the department last March. The department said that the latest report was designed to stimulate study and analysis of postwar foreign trade potentialities both by government and business.

The assumptions for the postwar year of 1948 were predicated upon the domestic economy of the United States functioning at capacity. This would be necessary, the authors of the report believe, for imports to total \$6,300,000,000 a year.

"Other payments to foreigners (for services and through the investment of American capital abroad) might be expected to aggregate close to \$4,000,000,000 a year so that the total amount of dollars available to foreign countries would be about \$10,000,000,000 a year," the authors said.

If \$10,000,000,000 a year of American funds is thus made available to foreign nations, the pattern of the use made by other countries in past years of the United States dollars available to them would indicate that American exports would reach \$7,000,000,000, the report said.

The report stressed the importance of looking ahead and planning for postwar foreign trade. It said that the United States government, in co-operation with other United Nations, is striving to remove some of the uncertainties and to aid in reconstruction of the broad framework of foreign trade.

Forecast

Twenty-five per cent of the country's industrial production will be exported after the war as compared with 10 per cent in the pre-war period, according to a recent survey made by the American Assn. of Shipping Agents.

Space in all steamship services will continue to be at a premium, the shipping agents believe, for a considerable period after the war, and about 50 per cent of all shipping for several years is likely to be for foreign relief, rehabilitation and lend-lease.

"The aims of American business in the field of foreign trade require little elaboration. Simply expressed, they are: (1) a volume of exports and imports more commensurate with our capacity than in recent pre-war years, and (2) less interference and disturbance through arbitrary trade restrictions and currency fluctuations," the report said.

Ecuador Extends Its Rail System

One of the most difficult railroad construction jobs now underway in South America is being carried out against great topographical obstacles in the high Andes of Ecuador. There two feeder lines are being extended to tap the northern and southern interior.

WARNS AGAINST LOSS OF MARKETS IN LATIN AMERICAN COUNTRIES

Criticisms made by the five senators who recently returned from a 50,000 mile tour of America's far-flung war fronts, and who observed that British post-war planning for trade throughout the world is far ahead of ours, have been acclaimed by C. O. Nelson, export manager, Fruehauf Trailer Co., who directs attention to the fact that in its trade with Latin American countries the United States is becoming a debtor nation.

In the case of South American countries we are importing more than we export, he says, probably because of delays encountered by shippers in getting official authority to ship.

Shipment of supplies involving the use of critical materials such as rubber and steel are still subject to restrictions. But

Peru Opens New Country With Andean Highway

Peru is forging the last link in a 572-mile highway from the Pacific coast port of Callao across the Andes Mountains to the little river town of Pucallpa, thus opening to overland traffic the riches of the jungle country beyond the Andes.

Besides its immediate role in the transportation of war-vital materials, the highway is described by Peruvian engineers as having much potential importance for the permanent development of the region around the Peruvian tributaries of the Amazon.

Vessels up to 3,000 tons of displacement can make the voyage between Pucallpa, on the Ucayali River, and the Amazon port of Iquitos, to which ocean-going freighters come up from the Atlantic. Thus the trans-Andean highway forms part of a land-water route from the Pacific to the Atlantic.

Lower Rates Quoted On Soda from Chile

Generally lower freight rates and surcharges for nitrate of soda from Chilean ports to North American destinations have been announced by the War Shipping Administration. The new rate and surcharge from Chilean ports to the Pacific Coast is a reduction of 60c. a ton, while a cut of \$2.31 a ton was made on cargoes destined for United States Atlantic ports. An exception to the cuts are for cargoes bound for the U. S. Gulf ports, where there will be an increase of 13c. a ton.

controls on the shipment of "free supply" goods, those in which critical materials are not used, have been relaxed to some extent.

However, Mr. Nelson points out, reports indicate that in many cases, owing to lack of authority, ships are leaving our shores for South and Central American ports with space in their holds, while ships arriving at these same ports from other countries are fully loaded with goods for the South American markets.

Continuance of the existing situation places U. S. trade with Latin America in jeopardy, he believes, and unless constant vigilance is exercised, American business may find itself losing some of its best customers.

How Air Cargo Will Affect

Four Basic Factors in Distribution

No. 3—Weight in Post-War Shipping

Lighter weight products and containers, likely in the post-war period, will make possible a greater variety and volume of shipments by air at substantial reductions in costs.

WEIGHT is a factor which, like time, value and distance determines in a major way the air transport suitability of a product in world trade. It also embodies a point of demarcation between air carriers and surface carriers such as railways and steamships.

Air carriers are limited in their weight lifting ability as compared with availability of cubic space for carrying cargo. With railways and steamships there is less restriction on weight carrying ability and more limitation from the viewpoint of cubic space.

Weight and Space

Airplanes sometimes may be fully loaded with goods in terms of weight and yet take off with ample unused cargo space.

Steamers and railways however may be fully loaded with goods from the viewpoint of space and yet depart without utilization of complete weight tonnage carrying ability. For this reason, air carriers will necessarily have to appraise weight as a primary factor in determining air cargo charges; whereas steamship operators will be concerned with alternate rates based on weight or space at the operator's option.

This situation accounts for the interpretation by steamship operators of a ton as 2000 or 2240 lb. or as comprising 40 cu. ft., which definition is employed in quoting rates on goods for ocean transportation.

Cubic Rate vs Weight Rate

Numerous products in transport are charged on a basis of the cubic ton and not on the weight ton.

Five portable typewriters in a box for export, for illustration, may weigh about 100 lb.; the rate of 30 a ton, however, is not assessed on the weight of 100 lb. which would amount to about 1/20 of a ton or \$1.50, but on the space occupied by the box or about 5 cu. ft., making for a charge of 5 out of 40 cu. ft. in a ton, or 1/8 of a ton, or \$3.75. In this instance, the ocean charge is \$2.25 higher because it is based on cubic measurements of a ton rather than it would be if the charge had been calculated on a weight ton basis. Most of the products likely to go by airplane in the post war period come in for

assessments on space basis if shipped by steamer.

While there is a limitation on space in a plane as compared with weight, it is not such as to warrant numerous instances where the charge will be on basis of 200 or 400 cu. in as representing a pound in international or domestic air transport service.

Weight and Distance

Weight and distance form the basis on which rates for transport of goods by airplane have to be built. Anything done to reduce the weight of a package therefore helps to bring down the charge to the shipper.

It is not always possible to decrease the weight of the product itself. However, great strides can be made in reducing the weight of the container for purposes of air transport. Even so there are prospects in the post-war period that many products without a reduction in cubic measurement may become lighter. The achievements with light metals in connection with war products will undoubtedly affect many products after the war.

Weight of Products

Every success in decreasing the weight of radios, accounting machines, instruments and similar articles by use of lighter metals will automatically tend to increase their air transport suitability, by decreasing the charges which in air transport are determined by weight and distance.

It is difficult to set any standards for air transport savings that can be effected by use of lighter metals in various products but they are likely to be impressive. In the manufacture of products, savings may be expected from the use of lighter materials, in connection with the containers in which the products are transported, weight saving is and can be accomplished on a still larger scale by the same procedure.

Packaging

Already various kinds of materials are being used for containers in air borne traffic. Lightness, protection against moisture and sufficient strength for the less rough handling in air transport,



By **GEORGE F. BAUER**
International Traffic Analyst
Air Cargo, Inc.

o o o

This is the third of four articles by Mr. Bauer on the main factors that will determine whether a commodity can be transported by plane to the advantage both of producer and dealer. There are four such factors: time, value, weight and distance.

Mr. Bauer is particularly well qualified to discuss these matters because of his background and experience. For 20 years he was export manager of the Automobile Mfrs. Assn. He initiated the World Trade League, and became its chairman. Previously, he was commercial agent in the Bureau of Foreign and Domestic Commerce; was an aid to the Financial Adviser of Haiti, and served in various Consular positions. He has traveled extensively and is versed in several languages. Recently, he was a delegate for the U. S. Department of State to the Pan American Highway Congress in Chile.

In addition, his knowledge of the fundamentals of commerce and transportation is broad and thorough, and he has had practical experience in many of the ramifications of international trade.—The Editor.

o o o

have been combined in many of these materials for containers.

Combinations of display cartons and shipping containers to avoid elaborate and heavy boxes, are being successfully used for war shipments to conserve the weight carrying ability of planes for products and only a minimum, consistent with strength, for containers.

Cooperage also is being employed for the greatest weight utilization of planes. Numerous shipments have been repacked to fit in better with weight limitations of planes in international transport. As experience is gained by shippers, in connection with air cargo, the need and cost of cooperage or repacking, is likely to vanish in the post-war period.

In world trade, by surface carriers it was necessary to provide strong and heavy packing boxes. Numerous operations of handling at junction points from motor carriers to railroads or at piers of steamships made this expensive pre-

(Continued on page 75)

Watch Your Earnings on Investment

The return on capital invested in a business is a better gage of managerial efficiency and of financial stability today than is net profit on sales. Moreover, the possibility of a tax on capital investment profits may force management into unpleasant and complicated situations.

By FRED MERISH

BEFORE Pearl Harbor, field studies indicate, comparatively few business executives considered earnings on invested capital when analyzing the results of operations. They considered merely the profit on sales. Those who overlooked this important computation did not always drift into the red, but today, with price ceilings, rationing, high taxation and other wartime restrictions, the hazards resulting from this oversight are much greater. Those who fail to keep an eagle eye on investment profit are likely to find themselves in a bad way when the postwar period arrives.

The capital invested in a business is the original investment augmented with profits added each year or losses deducted. The net profit on sales in dollars computed on this investment gives the percentage of return.

Profits vs. Earnings

A warehouseman may go far astray, for example, if he stakes his all on the net profit on sales today, insofar as business analysis is concerned. Where war restriction, shortages and high taxation are depressing profits, the general remedy is to cut expenses to offset this trend, but even the management able to reduce overhead in ratio to sales equal to the average before the war should not be too cocky about it unless the earnings on investment are satisfactory. The investment may be high and the profit in dollars may show unsatisfactory earnings on investment even though the percentage of profit on sales is up to average.

For Example

For example, a company may have had a volume of \$900,000 in 1942 and earned 6 per cent net profit, or \$54,000. Its net worth was \$1,200,000, so this \$54,000 net profit on sales gave it 4½ per cent profit on capital investment. War restrictions cut dollar volume this year to \$720,000, but the management was able to effect economies and managed to net the same percentage of profit as in 1942. But 6 per cent of \$720,000 sales is \$43,200 and the net worth or capital investment is now \$954,000, having been increased by the \$54,000 net profit earned in 1942. The \$43,200 net profit earned in 1943 computed on \$954,000 net worth gives only 3½ per cent return, a decrease of about 22 per cent in dollar earnings on invested capital. If this downward trend in volume continues, the earnings on investment will decrease further.

It is this percentage, the return on the

capital invested in your business, that is a better gage of managerial efficiency and financial stability today than the net profit on sales. Concerns that are maintaining or increasing sales volume at this time are not exempt from a periodical examination of investment profit because in the postwar period, should volume drop, they will experience a similar problem then.

Over-capitalization

The company that is over-capitalized had better mark time carefully for the duration. The company doing business on a more conservative investment is in the preferred position today. The following figures indicate why:

Company A had a volume in 1942 of... \$150,000
Upon which it earned a net profit of... .06%

Company A's net profit for 1942 in dollars \$ 9,000
Company A has a capital investment of \$200,000
\$9,000 represents a return on capital investment of04½%

Company B had a volume in 1942 of... \$150,000
Upon which it earned a net profit of... .06%

Company B's net profit for 1942 in dollars \$ 9,000
Company B has a capital investment of \$100,000
\$9,000 represents a return on capital investment of09%

Company B did a better managerial job because it made its invested dollars work harder than A and this is the ultimate yardstick of business efficiency, even in normal times.

Watered Stock

In some cases reviewed on a recent field study, the investment carried water, which gave the ownership an erroneous conception of earnings. If your net worth is inflated, you may be earning a bigger return than you figure but the water therein obscures the fact. Conversely, if the net worth is deflated and shows less on the balance sheet than it actually is, you may be earning a lower return than you figure. It is important, therefore, that you assure the accuracy of this figure before computing the return on investment.

This problem will project itself into the postwar period, when heavy demand, long bottled up, will necessitate expansion and modernization for many companies. Suppose Company A with a volume of \$150,000 modernizes and increases facilities in the postwar period at an investment of \$20,000 and that it

increases sales that year by \$20,000, also net profit from 4 to 5 per cent, hence, sales would be \$170,000 and net profit \$8,500, which, on an investment of \$200,000 would be 4.2 per cent earnings.

Company B, with a net worth of \$150,000, invests \$20,000 in a similar manner and increases sales from \$150,000 to \$170,000, or \$20,000, also net profit from 4 to 5 per cent, or \$8,500. Its return on \$150,000 investment is 5.6 per cent, so it would earn ½ more on invested capital although, in dollars, the return on sales would be the same in both instances.

Profit on Modernization

This indicates that the profit on modernization depends to some extent on your capital investment and explains why some concerns in bygone years complained that modernization did not produce the results expected, whereas others reported excellent results. It is obvious that management which depends entirely upon net profit on sales to tell whether it is profiting on modernization or other monies put into a business will often get an erroneous answer.

Taxes

High taxation touches every element of business operation today. Inasmuch as it may sooner or later encroach upon invested capital, we should all know something about the subject in order to consider our respective business positions intelligently. Like the law of diminishing returns in agriculture, a tax rate can be "upped" so high that it brings the tax collector a diminishing return in dollars. Many business analysts contend that income tax rates are approaching that point. Some legislators feel this way too and have suggested other sources of taxation.

Capital Investment Limitation

One suggestion that keeps cropping up from influential sources concerns a limitation on capital investment to produce revenue. Under the date-line of Oct. 2, last, comes a report that the Congress of Industrial Organizations and the Brotherhood of Railroad Trainmen with the support of the National Farmers Union, the League of Women Shoppers and the National Lawyers Guild recommend the repeal of the Victory Tax, opposition to a sales tax and that all profits above 4 to 5 per cent on invested capital be taxed as excise profits, which, if enacted, would play havoc with the financial stability of

(Continued on page 79)

Industrial Trucks and Tractors In American Industry

Every industry has contributed something toward improved materials handling methods and is in turn in debt to the materials handling equipment industry for the introduction of new methods and new means that will enable American industry to maintain its high production with low cost, and thus hold its place in the markets of the world



By EZRA W. CLARK

Vice President and General Manager
Clark Tractor
Division of Clark Equipment Co.

This is part of an address delivered recently before the 11th semi-annual meeting of the American Society of Tool Engineers at Indianapolis.

o o o

stevedore and 19 men, thus a well-equipped and experienced gang of willing men can load 20 tons per hour, per hatch; and that's pouring a cargo into a ship!

We have heard a great deal of criticism these days of the arbitrary restraints imposed by Government on industry, such as price ceilings, limitations of wages which influence costs, etc. Let us not forget that competition imposes price ceilings of one industry on another. Competing types of building material have operated to impose a ceiling on the permissible cost of brick. Engineers concerned with plant layout—engineers concerned with the evolution of industrial methods—engineers called upon to render technical advice for the improvement of production processes in the brick and clay industry and in some of the other 27 industries concerned, must consider the possible application of modern materials-handling methods and means for the elimination of wasteful and unnecessary labor costs.

An authority consulted by the speaker as to current and post-war developments in the brick and clay industry advises as follows:

"At least four organizations are now working on post-war plans for entirely new engineering designs for clay products' plants."

If these engineers can produce acceptable products on a low-cost basis, with the same materials that have been used for countless centuries, they must, perforce, reduce the percentage of unskilled labor by the introduction of modern, mechanized movement of materials; i.e., the fork truck and pallet method, correlated to fixed forms of transportation for permanent installations.

What can the railways do to maintain

STUDIES made 20 years ago by us showed that the internal freight bill of American industry exceeded the external freight cost; in other words, it costs more to move a ton of steel through an automobile plant in the process of production than it does to carry that steel from the mills at Pittsburgh to the plant siding at Detroit.

The story of materials-handling equipment in industry goes back to the two-wheel hand truck used on the docks and by the railroads and in the warehouses in the early 80's. Twenty years brought the power tractor and trailer—the next step was the fixed platform battery truck; then came the elevating truck with the low-cost skid. With it came the tote box for lift and carry, then the elevating platform truck which could lift, carry, tier and store loaded skids and tote boxes.

The development of the automotive type engine and its low-cost quantity production brought into the picture the wide use of the gas powered tractor-trailer combination for long and short hauls in many manufacturing plants.

Then came the first world war, with its burden on industry to supply munitions and materials in large quantity for the support of the A.E.F. The end of that war opened the era of the automobile and the enlightened leadership of that industry made possible remarkable improvements in the means and methods of production—not the least of which

was the improvement of mechanized material handling equipment.

Every industry has contributed something toward improved methods and means of materials-handling and is in turn in debt to this industry for the introduction of new methods and new means that will enable American industry to maintain its high production with low cost, and thus hold its place in the markets of the world.

It is on the docks, in the pier warehouses, and on the quays here and abroad that the greatest use is made of mobile materials-handling equipment. Here the hand truck gave way long ago to the shipside truck; first the platform truck that carried the loaded skid—then the tractor-trailer with 25 tons of seagoing freight, and now in these days the fork truck and pre-loaded pallet, 2 and 3 tons.

Pallets are preloaded and stored in the dock warehouse; here they are picked by the fork truck and placed onto trailers and as many as 25 trailers with 50 tons brought alongside under the ship's boom. A fork truck picks up the pallet, deposits it onto a ship's sling, or the pallet itself is lifted by hooks, and thus the load is swung aboard over the hold and down between decks where the load is stored and the ship trimmed.

Briefly, for the record, it should be stated that on the American east coast a gang will load and store a ton per man, per hatch, per hour. Stevedoring gangs are normally staffed with a foreman,

With the new Boone four-way pallet now used by the California Quartermaster Depot, Oakland, aisle traffic has been reduced as pallet loads no longer have to be picked up from one direction. The number of movements and approaches necessary have been lessened, thus facilitating and speeding up operations. Pallet loads are reported to be more accessible, maneuverability has been increased and handling has been made easier. Bolting of cross members, and the fact that boards of each face are at right angles is said to make the four-way pallet more rigid and stronger than the standard pallet formerly used.



Official U. S. Army Photo

their competitive position in the transportation field with highway motor trucks and air transports?

It is clearly evident that they must continue to haul the heavy freight of our nation and they must do it at low cost. This means the much wider use of modern, materials-handling methods.

From data which I have gathered, I estimate that there is now in use by the larger railroads the following industrial-haulage equipment:

Industrial Tractor	2,500
Crane Type Trucks	600
Lift Trucks	600
Power-driven Warehouse Trucks	300
Power Baggage Trucks	300
Fork Type Trucks	150
	4,450

These figures may be an understatement, but I doubt if the total power vehicles used by the railroads for this purpose exceeds 5,000.

Data is dead unless out of it one can draw helpful conclusions that build a more optimistic future. The fork-truck-pallet method of handling materials, if properly used, foretells a prosperous future for the railroads of our country; it means more than the purchasing of the right equipment—prior to that there must be the devising of the correct methods for the use of the proper equipment.

A number of years ago, the railroads introduced a workable interchange of freight cars between the various lines which did wonders for all of the railroads as the freight cars became a giant pool out of which all could use available equipment.

The fork-truck pallet method of handling freight means that products, properly cartoned and steel-taped to pallets, should move out of a factory by fork truck into freight car, be delivered to the purchaser; unloaded by a similar fork truck into the purchaser's receiving department and warehouse and thence to the production line for use.

This method reduces the manual handling of the pallet load to a minimum but it also means that there should be established by the railroads a free exchange of empty pallets.

I know one great manufacturer who, seeking to reduce the handling costs on incoming commodities, endeavored to have the railroads re-ship used pallets to the original source, without success, with the result that after months of bickering and delays, the bulk of the commodities moved on highway trucks because the trucker was more sensitive to courtesies of service.

The speaker has for many years been urging the railroads to provide a means whereby there shall be a free and unrestricted interchange of pallets and I envision the day when a greater tonnage of freight will move by rail because of the palletized packaging of adaptable products and case goods.

This country is just on the threshold of a period of industrial expansion the extent of which cannot be forecast, but it is certain that highways and motor trucks cannot be built fast enough to take the freight that will be offered and at the same time provide highway facilities for an expanding automobile usage.

The nation cannot greatly prosper without an efficient railway system, but the management, in cooperation with the employees, must work for the reduction of freight-handling costs. This means improved materials handling methods, which, in turn, means the streamlining of the freight-handling system to render better service at lower cost to the shipping and traveling public.

It is in the aviation industry that the

greatest effective use has been made of modern, materials-handling methods and means. Plant engineers will appreciate the advantage that the aviation industry had in starting from scratch because their mammoth production and assembly plants that are giving us the wings of war have been laid out so that they can use to the greatest advantage these new methods of interior transportation.

The larger plants, such as Boeing at Seattle, Douglas and Lockheed in California and their related plants at in and points, all use the fork truck as a part of a plant transport system.

It loads a train of trailers with especially constructed bins and tote boxes in which many items in the process of production are transported from one point in the plant to its next point in the progress of production.

The armed forces have made greater strides in the proper use of materials-handling equipment in two years than industry has made in the last 15 years.

In the pre-war years, the combined production of all the industrial truck and tractor manufacturers was approximately 2,500 or 3,000 per year, and now the company with which I am affiliated will build that many in a single month.

When the war started, there were probably 25,000 to 30,000 industrial trucks in all of the American industries, including the armed forces. Now it is a fair guess that the Army and Navy are using 75,000 of these towing and burden-bearing industrial haulage vehicles, representing in manpower a supporting supply army of 750,000 men.

America is only partly built. Your sons and the sons of our land when they come home victors in this titanic struggle, will be looking for a nation pregnant with opportunity. They will have earned a right to new and better things.

I advance the thesis that all American workmen must become skilled workmen if we are to hold our position in the post-war era. With unskilled labor, we may not expect to compete successfully as to quality or cost with the untold millions of the Orient and Russia. Let us create a society in which 99.98 per cent of the workable population is skilled and we shall deserve the standard of living that goes with merit.

If we are to endure as a nation in a world of competitive nations, we must make it unpatriotic, disloyal, unpopular for a man or a woman to be unskilled. Industries, schools, colleges, government must unite in this effort to bring into being in this country a state of society where all men and women are skilled. Then we shall deserve the standard of living that goes with merit.

Final Certificate

A final certificate giving it the right to operate in 27 states and the District of Columbia has been issued by the Interstate Commerce Commission to the National Delivery Assn., Inc., Washington, D. C. The firm operates as a long distance household goods carrier. Maurice Kressin is president and general manager.

TARIFF FILES

Needed at once by manufacturer, any number up to 12. Must be Automatic File and Index.

Address Box H-935, care DandW
100 East 42nd St., New York 17

FOR SALE

Old established successful fireproof warehouse business in Philadelphia, Pa. P.R.R. siding. Fine opportunity.

Address Box F-713, care DandW
100 East 42nd St., New York 17

SOLICITOR WANTED

By old established storage warehouse company, located in southern New England. Permanent well paying position. Must be experienced in long distance and household goods storage field, possess pleasing personality and be able to produce. References required. All replies treated with strict confidence.

Address Box K-259, care DandW
100 East 42nd St., New York 17

A PROFITABLE WAREHOUSE AND TRANSFER BUSINESS FOR SALE

In largest city in Rocky Mountain Region; Fireproof and Non-Fireproof Buildings; totalling approximately 27,000 square feet in fireproof and 37,000 square feet in non-fireproof. Three closed vans and four open trucks. Will sell business and lease or sell buildings. Business established 49 years. Reason retiring. A going business. Books open to interested party.

Address Box L-368, care DandW
100 East 42nd St., New York 17

A MODERN MANUAL OF MATERIALS HANDLING EQUIPMENT



By MATTHEW W. POTTS
Materials Handling Editor

All drawings by Harry Johnson

● This is the sixth installment of Mr. Potts' modern manual of materials handling equipment. It is being published serially in D and W exclusively. Each major type of materials handling equipment will be named, defined, illustrated, described and its usual applications explained.

Sling (Bar Spreader)

Definition—A sling made of flexible cable with rigid steel bar or pipe at the base of the sling, of sufficient width and strength to distribute the load across the entire width of the bars.

Description—A spreader bar sling can be made up of short pieces of rope, cable or chain, with an eye or ring at the apex, so that the sling can be lifted by a crane or hoist. The spreader bar at the bottom must be of sufficient strength and width to spread the cables far enough apart so that they will not come in contact with the load being lifted. Additional movable spreader bars of wood can be provided to spread the cables near the top of the load, or a permanent frame can be affixed in the cables to accomplish this same purpose. If possible, other protective covering can be provided on the cables to prevent damage to the load, and, if loose material is being handled, the cables can be provided with extra cargo netting as a further protection from spillage.

Application—Spreader bar slings were primarily designed for use in connection with handling palletized loads, where the pallets are provided with runners set in-

board so that the spreader bar can be placed between the top and bottom board, thus distributing the load over the length of the spreader bar and each board on the top surface of the pallet. This eliminates the necessity of rehandling and prevents damage to the pallets which would occur if only cable slings were used. The sling can be applied on all hoisting apparatus for this type of operation.

Sling (Chain)

Definition—Sling made of short pieces of chain, with eyes or rings in the ends which pass around or under heavy objects or with hooks that grapple the object being lifted.

Description—Chain slings are of many different types. They can either be single or multiple, depending upon the use for which they are intended, the type of container being lifted, or the operation being performed. They can be a simple, single chain with an eye at one end and a hook at the other, for looping, or they can be the chain grab type where the chain passes through eyes on two or more hooks, or they can be arranged on spreader bars in multiples as shown in the illustration. Multiple chain slings are generally used for handling casks, barrels or drums, but they can also be used for handling other types of containers. Chain slings are likely to damage finished surfaces of the commodities being handled, unless special protective coverings are used. There is also a tendency for the chain links to become hardened by repeated heavy duty service causing them to snap without warning, unless they are frequently annealed. Slipping of the chain links also sometimes causes heavy stress on the crane or boom. Care should be taken to see that links are straight before lifting and that they are inspected frequently for fractures or broken links.

Application—Chain slings are used for

● This material may not be reproduced in whole or in part, without written permission from the author and the publisher.



Chain Sling

for handling steel plate, machinery, etc., on lifting and hoisting operations.

Sling (Cargo Net)

Definition—A sling made of ropes in the form of a net with four or more rope loops for pick-up by hoist hooks.

Description—A large net of fairly heavy rope arranged with long rope slings at four or more points, each end of the long rope being fitted with an eye or loop so that it can be placed over a hoist hook during the lifting operation. In this type of sling, no bars or rigid

(Continued on page 97)

Spreader Bar Sling



LEGAL NEWS...

By LEO T. PARKER
Legal Editor



Compensation Not Reduced

Irrespective of the generosity of an employer, who paid an injured employee the same or increased wages, the employee still may recover compensation under state laws.

For example, in *Rutledge v. Daley's Blue Line Transfer Co.*, 31 Atl. (2d) 366, Pa., it was shown that a truckman sustained a severe injury which required the amputation of both feet at points several inches below the knees. Thereafter, two other amputations on each stump had to be performed. The employee was placed in a position easy to fill and he was paid his regular wages. Later the employee sued to recover compensation, under the Workmen's Compensation Law. The higher court held the employee entitled to a recovery and said:

"The generosity of the employer in paying claimant (employee) the same wages or salary after his accident as he had received before, irrespective of the fact that the work done by him was entirely different and of a very limited nature and could have been done by an untrained girl does not affect the legal principles applicable in situations where the legislature has declared that the permanent loss of two feet, etc., shall constitute total disability. . . ."

Safe Tools

Modern higher courts consistently hold it is the duty of all employers to furnish a reasonably safe place for employees in which to work, and also reasonably safe tools and appliances with which to perform the work. Failure to do so renders the employer liable in damages for injuries resulting to the employee.

For example, in *Luper Transp. Co. v. Campbell*, 133 Pac. (2d) 197, Okla., it was disclosed that a truck driver was seriously injured when he attempted to unload a 1,200 lb. belt from the truck at his employer's place of business.

The employee sued his employer to recover damages for the injury. During the trial testimony was given that when he started to unload the 1,200-lb. belt it slipped because there was no hoist to use. He was caught under the heavy belt and broke his left leg. In holding the employer liable for \$1,500 the court said:

"We are of the opinion and hold that the gist of the question of fact submitted to the jury was whether, under all the facts and circumstances, the failure to afford rollers, trucks, dollies or a hoist or other appropriate machinery necessary to a proper unloading of the heavy belts, was negligence."

Unemployment Law

Recently, many employees have quit their regular jobs hoping to obtain employment in defense work at higher wages.

Many of these employees have obtained benefits or payments from the State Unemployment Compensation fund while seeking other jobs. It is important to know that a recent higher court held these employees not entitled to unemployment compensation payments.

For example, in *Grant Co., v. Board of Review*, 29 Atl. (2d) 858, N. J., it was shown that a workman quit his regular employment and sought a job in a defense factory at higher wages. He applied for unemployment compensation. The question presented the court was: May a worker quit his regular job and remain voluntarily and indefinitely idle

while he seeks more highly paid employment, and meanwhile obtain unemployment benefits?

The higher court said: "The answer to that question must, we think, be in the negative. . . . The refusal of the applicant to resume his employment upon the ground that he wanted a better paying job was the equivalent of surrendering an existing job and purposely remaining idle."

Independent Contractor

The term "independent contractor" refers to a person who agrees to perform certain work or to render a particular service without submitting to control of the employer with respect to the manner of performance of the work.

For example, in *Smith v. Ludwig*, 133 Pac. (2d) 735, Wash., it was shown that a person, named Smith, brought suit to recover damages arising out of a collision between his car and a truck owned by a transportation company.

During the trial the testimony proved that the company employed a driver under a loose working arrangement on a percentage basis. The company had considerable investment in the truck used, bore all losses and paid for half of the gas and oil, and the driver had no equipment to use for others than the company. However, no detailed testimony was given with respect to the degree of contract the company officials exerted over the driver. Therefore, the lower court held the company not liable on the grounds that the driver is an independent contractor, but the higher court reversed the verdict.

LEGAL

Questions and Answers

. . . The Legal Editor will answer legal questions on all subjects covered by D and W. Send him your problems, care of this magazine. There will be no charge to subscribers for this service. Publication of inquiries and Mr. Parker's replies give worthwhile information to industry generally

Loss of Trunk . . .

Question: We have an important litigation and suit filed by the owner of goods who demands \$1000 for loss of a trunk which the receipt limited to \$25 valuation. It is claimed that the limitation clause in the warehouse receipt is not valid because the owner of the goods did not sign the receipt. Can you cite any higher court cases in our favor. If so will appreciate.—Great-Western Storage.

Answer: In the leading case of *Central Storage v. Pickering*, 114 Ohio 76, it was disclosed that a warehouseman issued a warehouse receipt limiting the value of the "bundle" to \$25. Printed in red ink on the receipt were the words: Read this receipt and contract carefully.

Since the owner did not sign this receipt, both lower courts held the owner was entitled to recover \$200 for the rug in the "bundle." However, the higher court reversed the verdict and in holding the warehouseman not liable for more than \$25, said:

"It is claimed by Pickering (owner) that the warehouse receipt did not constitute a contract binding upon him because no injury was made (by the warehouseman) of the value of the goods and his attention was not called to the paragraph of the receipt. . . . The judgment should have been in the sum of \$25."

Therefore, this case is directly in your favor. The owner of the goods neither signed the receipt nor did the warehouseman direct his attention to the limitation clause.

Of course, a limitation clause of this nature is not valid or effective if the goods are lost, or destroyed through negligence on the part of the warehouseman, because the courts will not permit a warehouseman to avoid liability where the loss results from his failure to use ordinary care to safeguard the goods. Also, see *Lyon Fireproof Storage*, 74 Cal. App. 87.

However, there are records of decisions by higher courts which refused to hold

(Continued on page 76)

How Chicago Trucking Operators Conserve Equipment and Manpower

Chicago trucking operators have demonstrated the value of co-operation in working out numerous operating and management problems, in the maintenance of equipment, the training of shop and driver personnel and the solution of office management needs.

By RANDALL R. HOWARD

COOPERATIVE PLANNING have come to be key words leading motor trucking operators in the Chicago area. Their methods and experiences are more or less typical of motor transportation conditions in many other trucking centers of the nation, and doubly interesting for that reason.

This "cooperative planning," of course, is toward the general end of the conservation of their supplies of equipment and manpower for its highest usefulness in helping to serve the national war transportation needs. From the viewpoint of the individual progressive operator, this conservation program usually includes the following coordinated activities:

1. Keeping his trucking units in the best possible condition of repair for road service, and the procurement of essential repair parts. This is being aided in the Chicago area by the work of an active Chicago District ODT Maintenance Advisory Committee, broadly organized to represent all community motor transportation and servicing interests.

2. A practicable shop preventive maintenance program. Chicago operators report that their intensified PM program to meet present needs has been a real "life saver."

3. A program for the procurement and training of new shop personnel. Chicago has several examples of novel methods in doing this.

4. A training program for drivers, including the training of an increasing number of women.

5. Cooperation with other operators, in joint community programs to conserve trucking mileage and meet the increasing transportation demands on trucking equipment. Conspicuous Chicago examples are the services of the first-to-be-organized Joint Information Office; and the more recent organization, by 33 leading motor trucking firms serving the Chicago suburban area, of what has been called "the largest single traffic dispatching system in the trucking field," a report of which appeared in the September issue of *DandW*.

The maintenance problem among Chicago truckers was first tackled in an organized way early in March. The Chicago District ODT Maintenance Advisory Committee was formed with Robert Temple of the Lincoln-Boyle Ice Co.

as chairman of the general supervising committee. The present set-up includes eleven sub-committees to represent as many different local operating and servicing branches of motor transportation industries. C. W. Van Patter, general superintendent of maintenance of Keeshin Motor Express Co., is chairman of the sub-committee representing common and contract carriers, and R. M. Pride of Decatur Cartage Co., is associate chairman. Robert Temple is chairman of the sub-committee for private carriers, and Glenn Johnson of Bowman Dairy Co., is associate chairman.

The other sub-committees respectively represent: bus line operators, heavy duty truck factory branches, light-duty truck dealers, trailer manufacturers, passenger car dealers, independent garages, parts jobbers, tire dealers, and oil companies. General and special meetings of the Maintenance Advisory Committee are often called. Problems pertaining to motor vehicle maintenance are freely discussed and decisions made as to what projects should be carried out, with the assistance when needed of the ODT district field office, headed by Frank Corcoran, district manager, and E. C. Boortz, ODT maintenance specialist.

The Maintenance Committee originally set up a nine-point motor vehicle servicing program for the Chicago area which included the following "special projects": Standard Inspection Practice, Standard Service Practice, Standard Repair Practice, Parts Availability, Parts Procurement, Parts Rebuilding Service, Material Substitution, Mechanics Training, Driver Training. The first two of the problems to be tackled, beginning several months ago, was a thorough local survey relating to "parts availability" and "parts procurement." The survey revealed, as expected, that many local trucks were off the road because of parts shortages, the most critical of these being axle and axle parts, water pump kits and parts, generator armatures, radiators, transmission gears, motor blocks, universal joints and valves. The committee made it its business, work-

ing through normal supply sources and Government War agencies, to develop ways and means for the procurement of such needed parts.

The local survey also indicated that local facilities for rebuilding motor vehicle parts were "quite sufficient, and could handle considerably more work." However, the rebuilders themselves reported that, in some cases, parts were being considerably injured during the process of removal by individual operators, for repair or replacement exchange. One definite example was fuel pumps, in some cases damaged so severely that they could not be rehabilitated. Also, as proving the local ups and downs in supply of replacement parts, it was reported at one meeting that fan belts and Ford coils, which had been critical a few weeks previously, were then available in sufficient quantities. Also, it was then reported that there was "not a single case where truck operators had difficulty in getting tires."

It was found that "the smallest truck operators" were having the most difficulty in getting parts. The committee discussion brought out that many operators apparently did not know or follow "the best methods" in their attempts to find and procure such parts. The analysis indicated that in general they (1) were not well posted on possibilities in the use of interchangeable parts, (2) lacked knowledge about the wide variety of expert local rebuilding services easily available, and (3) did not understand the repair possibilities of cold-welding and metalizing processes. These revelations caused the Maintenance Committee to vote for a widespread local distribution of an ODT instruction bulletin on "How to Order Replacement Parts."

The Committee also is giving continuous attention to "material substitution." One example is the investigation of reports about radiator troubles during hot weather from the use of iron-finned radiator cases, as a substitute for copper, and the Committee gave publicity to practicable methods for the control of this trouble. It was found also that inferior quality of gasoline being sold locally was making necessary excessive adjustments of carburetors and distributors.

Another follow-up by the Maintenance

Committee has been intensified publicity on the repair possibilities from cold-welding processes. Their previous local surveys had revealed an excessive number of trucks disabled because of "cracked blocks"—estimated as 10 times the number to be expected. The assumed causes were the exceptional severity of the previous winter, inexperienced maintenance help, and abnormal use of older equipment.

One part of their relief program was the organization of a school to teach shop mechanics some of the basic principles of cold welding. This program was carried out in cooperation with Kirkling and Co., which demonstrated its own cold-welding processes, and through the distribution of the ODT 12-page pamphlet on "Cold Welding." About 65 local trucking operators, dealers in truck equipment, service stations and garages cooperated in sending 145 machines to attend these classes. Three classes daily were started, to extend through a 10-day period, but because of the poor attendance at the day-time classes, only evening classes were held during the last four days.

Investigations by the Maintenance Committee of the critical labor conditions in Chicago servicing shops revealed that only about 50 per cent of their former force of mechanics still remained, because of depletions from Army enlistments and other kinds of war work. This has caused the Committee to give special attention to mechanics training. It recently helped to organize special tuition-free classes for training shop mechanics, in cooperation with the Chicago Board of Education, the U. S. Department of Education and the War Agencies concerned.

The initial "elementary" training classes for shop mechanics, limited to 10 or 15 members each, were started on a trial basis on August 30 at the Tilden High School in Chicago, the trainees for these first classes being provided by various automotive firms sponsoring the program. The classes were scheduled to begin on Monday and continue for five days with 8-hour sessions, or a total of

40 class hours during the week. Thus the employee, instead of "punching the clock" at the shop, answered roll call at Tilden High School, still earning his normal shop wages. However, by agreement, he was not entitled to collect his week's wages for his classroom work until after he had delivered one or two weeks of follow-up "post graduate" work in the company shop.

It is planned that the elementary class shall be followed up, as the enrollment of trainees may develop, by more advanced specialized training classes, through devoting a full 40-hour week to such topics as "Engine (minor overhaul)," "Front System and Steering," etc. That is, after a shop mechanic trainee has taken the general elementary course, his company may want him to specialize further in some particular branch of their activities. After these classes get well under way, it is expected they will be promoted through appeals made to all Chicago trucking operators by such general organizations as the Central Motor Freight Assn., Illinois affiliate of the American Trucking Assn., Inc.; the Cartage Exchange of Chicago; the Illinois Motor Truck Operators Assn., and other similar groups.

In the Chicago area there has been some development in the employment of women workers in motor vehicle maintenance and operation. However, there has been very little reported progress in the training of women as shop mechanics. They apparently don't like the "working in grease" which characterizes a great deal of the employment in most shops.

Also, many such shops are quite unattractive from the feminine viewpoint—often dark and grimy, crowded with equipment parts, and usually with such a variety of different mingled activities that the thought of trying to become a competent shop mechanic is discouraging. Most of the women being employed in shops are given only the simpler jobs, such as checking tires and oiling and greasing. But operators often report that a woman is apt to be more careful and systematic in her shop work than an average male worker.

The Keeshin Motor Express Co., reports that several women employed as tool room assistants are proving competent. In the motor bus field, women are being used increasingly in the work of inspecting and cleaning the buses. For more than a year, the Chicago Tunnel Co., has been employing several scores of colored women as platform workers in the handling of motor vehicle and other freight; and they have been proving efficient even though many of them have been working on the shift from midnight to 8 a.m. These women workers have proved especially reliable in attendance, and, aided by the mechanical labor saving devices which they operate, the handling work hasn't proved too heavy for them.

The Decatur Cartage Co. reports a novel method for getting additional mechanics for their shops. They have found it easier to hire additional new drivers for their trucks than to get additional mechanics. So they have been shifting some of their drivers into shop

Part of the instruction course is designed to familiarize the girls with the operation of an engine. Here Frank Anderson is demonstrating the pressure lubrication system.



Chicago Times

Instructor for the Willett Co., Chicago, checking applicant, Bernice Rowlett, while she is driving through standards as part of a skill test. Girls do not drive this equipment on regular runs, but are called upon to move it around the garage and therefore must be trained to operate all sizes and types of vehicles.

Chicago Times



work. Such drivers, long interested in the maintenance of their vehicles, already know considerable about shop practices. Hence the company has found that a two-weeks period of shop training will fit them very well for taking care of the all-round maintenance jobs at some of the smaller away-from-Chicago shops on their route. R. M. Pride of that company reports that 12 to 15 of their former drivers have been developed into shop mechanics.

Driver training is one of the special projects which the Chicago District ODT Maintenance Advisory Committee hasn't yet undertaken. Among Chicago motor truck operators there has been considerable expansion in the employment of women as drivers. One of the most notable

examples is the Jewel Tea Co., Inc., with national headquarters at the near-by town of Barrington. They have nearly 1,000 drivers operating light route cars in the distribution of food products in many different States, and more than 700 of these drivers are women. These women, when trained, are proving to be careful and competent drivers, though they are offering, reports G. H. Sibley, chief of their sales operating division, "some puzzling new management problems."

Dealer's Transport, also with Chicago headquarters, has some 1500 drivers scattered from Coast to Coast, operating heavy-duty highway equipment being used exclusively in the transport of jeeps and other war equipment. About 10 per cent of these drivers are women, reports general manager B. H. Massey. Some of their west-coast runs are 700 to 800 miles and one of the troubles is that food and shelter and comfort facilities along some highways are not planned for women drivers. One of the remedies which the company is working out is the development where possible of crews

of all-women drivers, versus the mixed crews with which they began. They report their women doing "just as good a driving job" as their men, and usually that they are more careful with their equipment than the men.

The Central Motor Freight Assn., Chicago, affiliating Illinois common and contract motor carrier members with the A.T.A., has been sponsoring various projects to aid in improving the operating and management practices of their members. One of these is a "guaranteed arrest bond certificate" carried by drivers, which may be deposited as bail in case of arrest of a driver or his vehicle, thus permitting the driver to go on his way without the delay of the cargo; and it is reported that the plan has had substantial results in Illinois in the decrease of "small town J. U. arrests." General Manager Dick Thornton estimates that about three-fourths of all the drivers of companies affiliated with the C.M.F.A. now carry such cards.

The C.M.F.A. also is sponsoring an official "motor carrier rate course," given by the Chicago College of Advanced

Traffic, to help relieve the pressing need among trucking operators of office employees able to handle motor truck tariffs and claims. Reports to the writer indicate not a great deal of progress by Chicago motor truck operators in having employees take this course, with the exception of a few of the larger operators. There are increasing needs by many common carrier trucking operators for expert personnel to handle tariffs and claims, yet it seems that fewer persons are being trained to supply these needs. Increasing percentages of those being trained as tariff and claim experts are women.

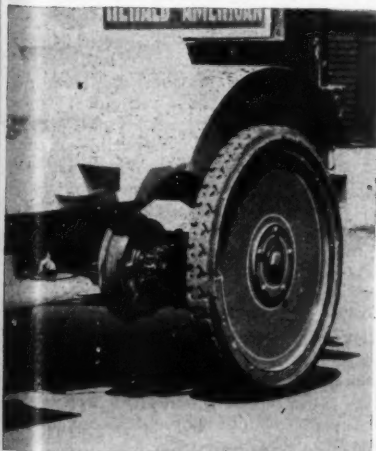
It will be seen, as a summary statement, that Chicago truckers, as an example of what probably is going on also in other trucking centers, are facing and working out numerous operating and management problems. They are learning to cooperate more and more toward the solution of these problems—the maintenance of their equipment, the training of shop and driver personnel, and attention to office management needs.

Ingenious Truck Conversion

TYPICAL of "American ingenuity" is an ingenious conversion of 15 delivery trucks operated by the *Chicago-Herald-American* in the congested Chicago loop district.

On their regular rounds, distributing editions of the newspaper, the trucks ply the crowded loop thoroughfares at virtually all hours of the day and night. Rear driving wheels of the trucks are either of plywood with solid rubber tires

Practically the same results are achieved by the slightly different method of conversion shown above. In this construction, the standard rear axle is moved forward by shortening the propeller shaft. The same size sprockets and chain are used, except the driving chain runs horizontally instead of vertically.



or artillery type with steel rims. This unique construction, it is said, actually saves rubber, and the novel appearance imparted to the vehicles serves to impress upon the public the necessity for conservation of rubber on all kinds of motor vehicles.

Two methods of converting rear drives on standard half-ton Chevrolet trucks to permit use of the large diameter steel rimmed or solid rubber tired wheels have been utilized.

One method specifies use of the standard rear axle in its regular position, except that it is lowered by attaching the rear springs above, instead of below, the axle. A drive sprocket is mounted on the flange ends of the regular axle by means of a special flange and a driven sprocket is attached to the hub of the wheel, which is mounted on a tubular "dead" axle located directly above the center line of the standard axle. Drive is by means of a roller type chain.

An alternate method requires shortening the propeller shaft and moving the standard axle ahead. It is then attached to the chassis frame by special brackets and clamps. The drive sprockets are mounted to the axle shafts in the same manner described above. This arrangement provides the equivalent of the jack shaft in a conventional side chain drive design.

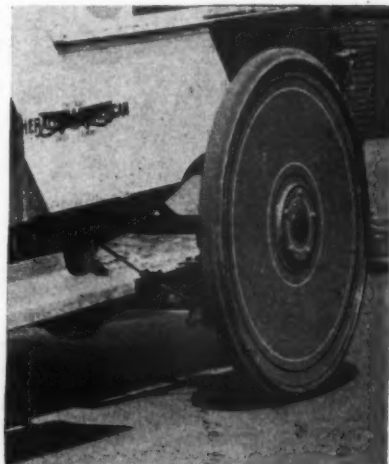
With this adaptation vehicle speed is reduced to a maximum of about 12 miles an hour, said to be ideal for operation in loop traffic, while engine speed is maintained at a rate equivalent to about 28 m.p.h. This engine speed is sufficient to permit proper torque performance,

adequate engine lubrication, and to prevent spark plug fouling.

It is estimated that the life either of the steel or solid rubber tires used on these converted vehicles will approximate 12 years.

The original intention was to use ar-

Standard Chevrolet half-ton truck operated by Chicago Herald-American in the "Loop" District, converted for use of large diameter plywood rear wheels with solid rubber tires or artillery type wheels with steel rims. This type of conversion calls for use of the standard rear axle in its regular position, with an auxiliary or "dead" axle directly above it. Final drive is by means of sprocket and chain, operating vertically.



tillery type wheels with steel rims exclusively, even though insufficient traction in operation over snow and ice presented a handicap. The switch to solid rubber tires came quite by happenstance. An employee of the truck maintenance service, while driving to work, noticed a number of discarded hard rubber tires consigned to rubber salvage. Permission

to obtain possession of the tires was granted immediately upon advising government officials of the worthy purposes for which they were to be used.

It is now planned to use the artillery type wheels with steel rims during the summer months and change over to the solid rubber tired wheels for winter operation.

The conversions were decided upon strictly to meet a wartime emergency. Traffic officials of the company which devised the arrangement were fully aware that certain drawbacks would be involved in departing from recognized, standard engineering and construction principles. Nevertheless, the experiments have demonstrated their value.

Officials Rap Overlapping Agencies And Restrictive State Highway Laws

CHICAGO—Duplication of effort by overlapping governmental agencies has created "confusion and chaos" in the administration of highway transportation affairs related to the war program, it was charged at a special recent conference here of 6th Zone Army Transportation Corps officers, highway advisory committees and state highway officials of Illinois, Wisconsin and Michigan.

On such matters as truck and bus inventories and regulation, share-the-ride programs for war workers, staggered hours for war plant operators and other details, it was pointed out, the Office of Defense Transportation, Office of Civilian Defense and Office of Price Administration claim independent jurisdiction.

Citing the fact that at one time local communities in Illinois had five transportation administrators, "none of whom knew what his duties were," F. N. Barker, Springfield, Ill., executive secretary, Illinois Highway Traffic Advisory Committee to the War Dept., declared "there are too many agencies involved in the highway transportation situation in Illinois." He related instances of being denied information by municipal authorities who either refused to recognize the committee or informed him that the data sought has already been supplied to other agencies.

Hugh Jones, Wisconsin motor vehicle registrar, Madison, Wis., after discussing the confusion regarding regulation of speed limits, gas rationing and other matters, suggested that considerable difficulty could be eliminated if all involved agencies could get together and develop a uniform enforcement policy.

Capt. C. J. Seavarda, of the Michigan state police, proposed an "enforcement manual" clearly specifying the rights of drivers and the enforcement duties of police.

To end the confusion the conference recommended that the National Highway Traffic Advisory Committee, whose chairman is Thomas H. MacDonald, chief, Federal Public Roads Administration, study possibilities for centralizing all highway transportation matters relating to the war effort in the Army Transportation Corps.

To provide for closer cooperation between the Transportation Corps and the state traffic advisory committees it was decided to add a civilian liaison officer

to the personnel of the 6th Zone Corps headquarters in Chicago. Chester C. Burdick, Lansing, Mich., a highway engineer and recently a Public Roads Administration executive, was named to fill this post.

The need for additional motor transport equipment, repair parts and manpower for handling the army's highway transport problems and greater attention to proper maintenance of arterial highways were stressed by various speakers.

Army officers emphasized the importance of eliminating state barriers to the free movement of motor vehicles. Among difficulties specially mentioned by Col. Dan C. Hardt, chief transportation officer, 6th Zone, Army Transportation Corps, were the lack of reciprocity between states, the delays many trucks experience passing through certain towns because of minor infractions of local regulations. Discussing the interchange of highway equipment he told

how a highway truck loaded with an important war shipment was held two days in Chicago because the driver could not arrange a transfer.

"If carriers were fully cognizant of the interchange of equipment operations," said Col. Hardt, "the originating carrier in this case would have proceeded to its ultimate destination either by leasing arrangements with the second carrier or by interchanging trailers at Chicago."

The Transportation Corps, Capt. Alex Baxter of the Chicago zone office said, is attempting in good faith to assist motor carriers in every way possible where their legitimate rights are involved. He added, however, that "carriers are sometimes careless of the truth."

Major General Henry S. Aurand, commanding officer in the 6th Service Command, Chicago, and Col. Frederick C. Horner, chief, highway division, Army Transportation Corps, Washington, D. C., were among the speakers who explained the army's truck transportation program and suggested ways for closer cooperation among state advisory committees in transportation activities—(Slawson)

American Motor Vehicles Have Become Greatest Global Common Denominator

American military motor vehicles have become the common denominator of all continents and climates. American automotive maintenance manuals, translated into languages as varied as the terrain over which the vehicles operate, are exerting a worldwide civilizing influence.

These by-products of World War II are described in the Mid-Year War Engineering Issue of "SAE Journal," by Brig. Gen. Julian S. Hatcher, USA, Chief, Field Service Division, Office Chief of Ordnance.

"Our soldiers," writes Gen. Hatcher, "are driving American tanks and trucks over camel trails, reindeer tracks, kangaroo runs, water ox paths and crocodile slides, and into country and through country where camels or reindeer or crocodiles would turn around and go home. Vehicles and roads used to grow up together. Now the Army asks only if there is traction of leverage, and if there is, we go in and fight."

"And wherever we go we carry the civilizing influence of our maintenance manuals, translated into languages as

varied as the terrain. We are sending to the mighty armies of the United Nations our tanks and trucks, which speak an international language, and our manuals translated into their separate tongues. We are placing our vehicles and methods in the hands of bushmen and Frenchmen, men of swamp and jungle and ice and sand, camel-drivers and fiat tourists. The men of the entire United Nations are learning American lessons they will not forget. Our vehicles are going ahead of the flag, to paraphrase an old imperial slogan, and this time they carry freedom."

General Hatcher reports that two-thirds of the daily sustaining tonnage necessary to supply fighting forces are composed of petroleum products, only one-third of ammunition, food, and general supplies.

"This," he comments, "is a graphic index of the extent to which the modernization of the Army has progressed since the last war, when the bulk of supplies consisted of ammunition first, and of forage for our horse-drawn vehicles next."

ELECTRIC PROTECTION

against

FIRE • BURGLARY • HOLDUP

Aero Automatic Fire Alarm

Sprinkler Supervisory and
Waterflow Alarm Service

Watchman Supervisory and
Manual Fire Alarm Service

Burglar Alarm—Holdup Alarm

ADT

Controlled Companies of

AMERICAN DISTRICT TELEGRAPH CO.

155 Sixth Avenue

New York, N. Y.

Central Station Offices in all principal cities

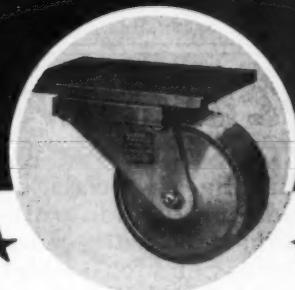
In War...

In Peace..

Keep Ahead with

DARNELL

Casters & Wheels



There is a type of Darnell Caster or Wheel for every kind of use and floor. Made for light, medium and heavy-duty service, you are sure to find in the Darnell line the exact caster or wheel to meet your individual requirements.

FREE MANUAL

DARNELL CORP. LTD., 60 WALKER ST., NEW YORK, N. Y.
LONG BEACH, CALIFORNIA, 36 N. CLINTON, CHICAGO, ILL.

Equipment

Services

Supplies

Classified Index to Advertisers

AIR EXPRESS

Air Transport Association of America..... 18

ALARMS (Fire)

American District Telegraph Company..... 37

BATTERIES (Storage)

Edison Stge. Battery Div. Thomas A. Edison, Inc..... 38

BODIES (Truck & Trailer)

Anthony Company, Inc..... 18

Gerstenslager Company..... 38

Herman Body Company..... 2

CASTERS (Truck)

Darnell Corporation, Limited..... 37

Nutting Truck & Caster Company..... 44

CLOCKS (Time & Watchmen's)

American District Telegraph Company..... 37

When writing advertisers please mention D and W

D and W, December, 1943—37

WHAT KIND OF EQUIPMENT FOR 194X?



THE war is making this question paramount. You, as a fleet operator, and Gerstenslager, as a manufacturer, are encountering factors right now which help answer this question for both of us. ★ With any time and any energy to spare, let's mesh our experience by planning, and thinking about: What kind of equipment will you need for 194X? The Gerstenslager Company would like to hear from you. We think in terms of either a single custom-built job or of a fleet of any size.

GERSTENSLAGER CO.
EST. 1860. WOOSTER, OHIO

SAVE MONEY

To save time and money in handling materials do it on skids or pallets in units of 2 to 5 tons with battery industrial trucks. Send for booklet "Modern Material Handling."

ADDRESS EDISON STORAGE BATTERY DIVISION,
THOMAS A. EDISON, INC., WEST ORANGE, N. J.

Edison ALKALINE BATTERIES

CONVEYORS...

Save Time! Cut Costs!

Ask for Booklets—391 and 432—covering Freight Type Conveyors for handling boxes, bags, cartons, etc., from cars or trucks to storage and from storage to cars or trucks. Write—phone or wire.

Portable Machinery Division
A. B. Farquhar Co., Limited

Chicago, Ill.

York, Pa.

Clifton, N. J.



CONVEYORS (Gravity)

Filter Paper Company (Conveyor Equipment Division)... 39

CONVEYORS (Portable or Stationary)

Farquhar Company, Limited, A. B. 38
Filter Paper Company (Conveyor Equipment Division)... 39
Haiss Manufacturing Company, Inc., George... 39
Mercer-Robinson Company, Inc. 39

COVERS (Piano)

New Haven Quilt & Pad Company 42

CRANES (Industrial Truck)

Baker-Raulang Company 1
Mercer-Robinson Company, Inc. 39

DECALS

Meyercord Company 9

DOLLIES

Nutting Truck & Caster Company 44

Stencil Machine

With practically every manufacturer making products for the Government, a certain proportion of these shipments must be packed for export. Most Government departments require practically all shipments to be marked in 1½ in. and 1¼ in. letters.

The Diagraph-Bradley Stencil Machine Corp. claims to be the only stencil machine manufacturer in the world making a machine larger than 1 in. Its complete letter sizes are as follows: ½ in., ¾ in., 1 in., 1¼ in., 1½ in., and 1¾ in.

Diagraph-Bradley has been in business for over 50 years, and is said to have had many of these large letter machines in continuous use for over 30 years. Additional information may be obtained by writing to Diagraph-Bradley Stencil Machine Corp., 3745 Forest Park Boulevard, St. Louis 8, Mo.

Portable Gasoline Driven Generator For Rapid Battery Charging

A new portable gasoline driven generator, for rapid battery charging is announced by Hunter-Hartman Corp., St. Louis, Mo., maker of rapid battery chargers for the automotive industry. This new unit is said to eliminate many of the problems accompanying the use of storage batteries in operations where electric current and conventional equipment for charging are not conveniently available.

The equipment is designed to charge 6-, 12-, 24-volt batteries at 10 to 300 amperes, and consists of a specially designed generator driven by a 6 h.p. single cylinder, air cooled, gasoline engine which is equipped with air cleaner, gasoline filter, magneto, self-starter, rope starter, gas tank and remote stop control.

For easy portability, the entire unit is mounted on a skid-type base, equipped with 5 in. wheels. When the unit is in use the wheels are raised from the ground, thus preventing creeping.

The manufacturer states that the equipment is proving unusually valuable in airplane factories, and around airports for starting motors as well as charging batteries, through making current quickly available anywhere on the field or at any other place where it is needed.

Operators of commercial vehicles and large industrial plants are said to have made substantial reductions in equipment hours lost through battery failures, as well as definite economies in servicing costs, through bringing the current to the battery—wherever installed—instead of removing and replacing the battery, as was formerly necessary.

The unit is used also, according to the manufacturer, as a direct current lighting plant with output range from 1000 to 3000 watts as required.

CUT COST • INCREASE SPEED!

FILCO

EASY-RIDE CONVEYORS



This modern gravity conveyor carries cases or cartons to any department speedily and efficiently! Sturdily constructed reversible curves, straight sections. Permanent or portable; with or without adjustable supports. Our engineers can solve your problems—write us your requirements and ask for illustrated folders.

EQUIPMENT DIVISION

The FILTER PAPER Co.
58 E. 24th St. Chicago

ELEVATORS (Portable or Stationary)

Mercer-Robinson Company, Inc.	39
Revolvator Company	41
Sedgwick Machine Works	40

END GATE (Elevating)

Anthony Company, Inc.	18
-----------------------	----

ENGINEERING (Materials Handling)

Industrial Engineering Works	40
------------------------------	----

FLOOR RESURFACING MATERIAL

Flexrock Company	43
Stonhard Company	41

FORK TRUCKS

Automatic Transportation Company	Second Cover
Baker-Raulang Company	1

FREIGHT TERMINALS

Consolidated Freightways	18
Harborside Warehouse Company, Inc.	Back Cover

GENERATORS (Gas-Electric)

Ready Power Company	41
---------------------	----


Waterproof Tape

Conveying cargoes of badly needed supplies to the far-flung battle fronts is the job of the weather proof container. Some of these water resistant containers made of fibre-board are made to withstand, contents and all, submersion in the ocean for long periods of time, without disintegrating.

The finest of these cartons, carrying vital overseas-bound cargoes of ammunition, medical equipment, food, clothing, precious instruments, and thousands of other necessities, would be hamstrung if it lacked the proper sealing to keep its contents intact. For that express purpose McLaurin-Jones Co., Brookfield, Mass., developed its solseal waterproof tape.

This new tape is applied in the same simple manner as regular sealing tape, using the same type of moistening dispenser. A special solseal solvent is used as a moistening agent. Solseal solvent is a non-inflammable, non-volatile, non-corrosive mixture of chemicals that will, upon wetting solseal, cause it to become waterproof after a 72-hour period. Bondings effected with this tape, immersed in water under strain, is said to have withstood immersion for weeks, and in some cases over eight weeks, without any releasing of the tape.

When writing advertisers please mention D and W



MERCER EQUIPMENT

for the HANDLING of

BULKY • CASED • HEAVY

MATERIALS

Cranes, Elevators, Lift & Trailer Trucks, Conveyors, Live Skids, Drum Hoists, Winches, Tool Wagons, Carts.

WRITE FOR DETAILS

MERCER-ROBINSON COMPANY
INC.
30 CHURCH ST. NEW YORK 7, N. Y.

CARGO LOADING CONVEYORS



- 20 to 35 ft. length
- Ball-bearing rollers
- Electric or gasoline motor drive
- Also low headroom and special purpose conveyors

Write for data and prices, naming size and service conditions.

BUILDERS OF HIGH GRADE MATERIALS HANDLING EQUIPMENT FOR OVER 40 YEARS.

HAISS

CARGO CONVEYOR

GEORGE HAISS MANUFACTURING CO., INC.
139th St. & Rider Ave., New York 51, N. Y.

Sedgwick

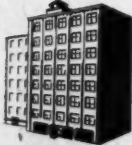
Electric and
Hand Power

HOIST EQUIPMENT

FOR SPECIAL PURPOSES

THE immediate job is to keep materials moving—faster and better than ever before. Vertical transportation in the warehouse can become a "choke point". Let the skill and experience of Sedgwick engineers help you overcome any lifting problems in the handling of all types of loads between two or more floors.

★
Write for
Catalog



★ ★ ★ ★ ★
Since 1893, Sedgwick has specialized in the design and manufacture of lift equipment to meet normal and special requirements.

Correspondence Invited

Established 1893

SEDGWICK MACHINE WORKS
155 WEST 15th STREET NEW YORK

Dumb Waiters & Elevators

PRODUCTION



PROCESS

**MATERIALS HANDLING
EQUIPMENT**

SAVE
MANPOWER
BY THE USE OF
HANDLING EQUIPMENT

INDUSTRIAL ENGINEERING WORKS
467 BLOOMSBURY ST. TRENTON 6, N. J.



*From Driver
to Owner*
**INTERNATIONAL
SERVICE**
*Suits Them
All*

**EXTRA—EXTRA
READ ALL ABOUT IT!**

Low cost, simple, practical, quiet, efficient humidification as low as \$100 to stymie the evils of dry air caused by winter heat. Installed like a unit heater. Prevents drying out of materials; prevents warping and checking of wood,



shrinkage of paper and loss of weight; eliminates fire producing static electricity; improves human health, comfort and efficiency. **WRITE FOR BULLETIN.**
Armstrong Machine Works
893 Maple St.
Three Rivers, Mich.

ARMSTRONG UNIT HUMIDIFIERS

HOISTS (Hydraulic)

Anthony Company, Inc. 18

HUMIDIFIERS

Armstrong Machine Works. 40

JACKS (Lift)

Nutting Truck & Caster Company. 44

LIFTS, SPECIAL (Hand)

Revolver Company. 41

LONG DISTANCE MOVING

Dillner Transfer Company, W. J. Front Cover

Save Critical Rubber

You can keep your trucks rolling and keep your production up without any unnecessary wear to your floors or roadways by using patented End-Wood wheels instead of rubber, according to the Metzgar Co., Grand Rapids, Mich. Made of wedges of finely selected hard, kiln-dried maple, End-Wood long-wearing tread, with a choice either of oilless bearing, or roller bearing, these wheels are made in sizes from 2½ in. to 20 in. in diameter to replace present wheels.

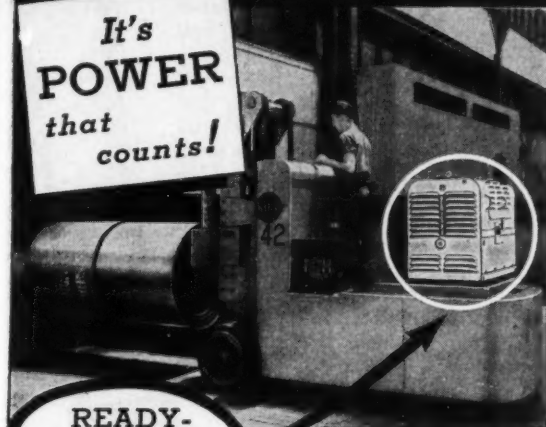
This wheel is not a mere substitute for rubber, it is said, as it lasts longer, rolls easier and is sufficiently quiet and shock-absorbing for normal purposes. Moreover, it is said to be chemically treated and spark-proof.

The Metzgar Company, Grand Rapids, Mich., who manufacture these truck and trailer wheels, and wheel casters, have been, for a long time, fully on defense. They say they are geared to take on some additional business with priorities of not less than AA-2.

Don't assume you can't get equipment—Inquire.

NO OTHER POWER PROVIDES
PEAK EFFICIENCY
24 HOURS A DAY—7 DAYS A WEEK

It's
POWER
that
counts!



**READY-
POWER**

the continuous power
THAT MAKES TRUCKS GO

★ With READY-POWER (a gasoline-electric power plant for electric truck operation) truck speed is maintained and maximum tonnage is handled every hour throughout the day. Write for descriptive literature.

THE READY-POWER CO.
3849 GRAND RIVER AVENUE, DETROIT, MICHIGAN

**NO
DELAY
THE**



Stonfast Way

Applied directly from container! Traffic rolls immediately!

SEND FOR DETAILS TODAY!

STONHARD CO.
403 N. BROAD ST., PHILA. 8, PA.

MATERIALS (Ind. Bldg. Maintenance)

Flexrock Company 43
Stonhard Company 41

MESSAGE CONVEYORS

Sedgwick Machine Works 40

MOTOR TRUCKS

Autocar Company 17
International Harvester Company 40

PADS (Canvas Loading)

New Haven Quilt & Pad Company 42

PADS (Kersey)

New Haven Quilt & Pad Company 42

REFRIGERANT GAS PURGER

Armstrong Machine Works 40

REFRIGERATED BODIES (Truck & Trailer)

Gerstenslager Company 38
Herman Body Company 2

RIGGING

Dillner Transfer Company, W. J. Front Cover

SKIDS (Semi-Live)

Nutting Truck & Caster Company 44

When writing advertisers please mention D and W

RED GIANT LIFTRUCKS

Send for special folders showing the latest models of these popular hand trucks for economical moving of all kinds of heavy material. **RED GIANT LIFTRUCKS**, made by the manufacturers of the famous **REVOLVATOR**, (Reg. U. S. Pat. Off.) Portable Elevator, are exceptionally safe, sturdy, and simple to operate.

Single, double, and multiple hydraulic lift. Widths 18", 24" and 26½", lifting 2,500 to 15,000 lbs., 1¾ to 7 inches.

Save time, money, and manpower by installing as many as you can use.

Ask for folder DW



BUY WAR BONDS

REVOLVATOR CO.

DESIGNERS AND MANUFACTURERS OF MATERIAL HANDLING EQUIPMENT

NORTH BERGEN, N. J. Since 1904

D and W, December, 1943—41

Have You Enough



Dreadnaught FURNITURE PADS *for the duration?*

Manufacture of this "first line of defense" for our industry may be halted at any time.

Don't wait until our present limited supply is exhausted. When these are gone, there may be no more until the war is over. Ceiling prices. Quality good as ever.

Write or wire your order without delay.

NEW HAVEN QUILT & PAD CO.

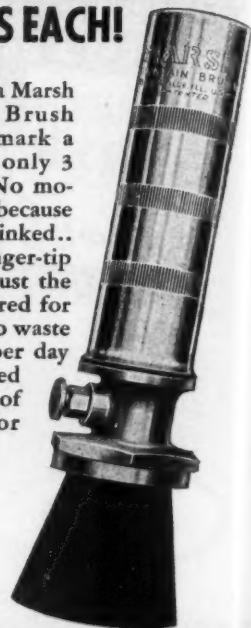
82 FRANKLIN STREET, NEW HAVEN, CONN.

STENCIL MARK YOUR SHIPMENTS TIME: 3 SECONDS EACH!



Yes, with a Marsh Fountain Brush you can mark a stencil in only 3 seconds. No motion is lost because it's always inked.. ready for marking. The finger-tip button control provides just the right amount of ink required for proper stencil marking. No waste or spillage. Many hours per day and 20% in ink can be saved with this modern method of marking stencils. Write for free booklet.

MARSH STENCIL
MACHINE CO.
24 MARSH BUILDING
BELLEVILLE, ILL., U. S. A.



MARSH
FOUNTAIN BRUSH

Brake Tester

A new truck, trailer and bus brake tester has been announced recently by the Safety Equipment Co., South Bend, Ind.

By accurately measuring brake force, this machine is said to permit determination of actual stopping distance, to reveal necessary mechanical adjustments, to show braking power of loaded vehicles, to measure brake torque, to eliminate the need of road tests, to equalize brakes, and sets up standards for correct stopping to prevent tire wear.

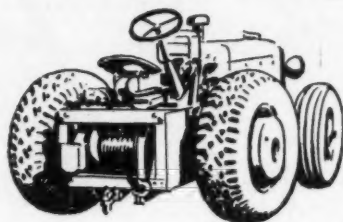
The operating principle of this Bennett-Feragen truck, trailer and bus brake tester is said to permit duplication of actual brake service conditions and to allow brakes to be tested at their maximum capacity. Wheels are cradled between pairs of revolving rollers, which are so constructed as to provide friction surfaces equivalent to the tire on dry concrete. The rollers turn the wheels against normal running friction. When the brakes are applied, the force required to turn the wheels against the brake resistance is registered on the dials. This reading is the actual braking force existing between the tire and ground surface.

Reinforced Plastic Wheel

Resinoid wheels, used on all types of hand-operated trucks, are now offered by the Rapids-Standard Co., Inc., Grand Rapids, Mich., with armored metal hubs, for practical application to power-hauled industrial trailers.

This new wheel is said to be the answer to quite a few industrial problems. Its tread is ABK laminated plastic-fabric, of a type commonly used in ship stern tube bearings and steel rolling-mill bearings. This wear-resisting material is bonded under terrific heat and pressure to a shock-resisting core. The hub is reinforced with armored metal inserts to insure positive bearing fit and greater shock resistance, and to eliminate excessive side thrust wear.

TAILORED to WAR JOBS



With winch driven from power take-off this Case industrial tractor serves as hoisting engine, stump puller, car mover; indeed, as power for any job that can be done with a five-ton pull on a line. It has stability to handle most jobs without special anchorage, mobility to move swiftly between jobs, plus instant availability of regular drawbar power and belt power. Ask your Case distributor about Case-powered cranes, loaders, mowers, sweepers, snow plows. J. I. Case Co., Racine, Wis.

CASE

POWER That Sees Things Through

SHOP MULES are in demand by all Our Fighting Forces...

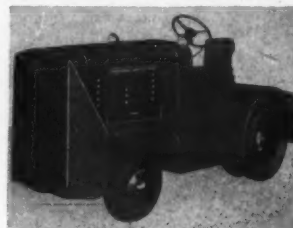


Model A14 — 7.50x18 Drive Tires. 6.00x9 Front Tires. Medium Duty Type for moving materials at industrial plants, airports, docks, railway shops, terminals.

ly, just as they have been serving industrially in the days of peace.

War demands upon our production facilities force us to curtail, for the duration, models we have to offer. These are now limited to the A14, J233 and A3, the Midget Model.

Parts and Service are Available from I H C Branches and Dealers



Model J233—Most ruggedly built gas tractor made. Unexcelled for heavy and extra heavy jobs. Approximately 90% IHC parts.

W. F. HEBARD & CO. . . . CHICAGO

SNOW PLOWS

Case Company, J. I.	43
Hebard Company, W. F.	43

STENCIL MACHINES

Diagraph-Bradley Stencil Machine Corp.	Third Cover
Marsh Stencil Machine Company	42

TRACTORS, INDUSTRIAL (3 or 4 Wheel)

Automatic Transportation Company	Second Cover
Baker-Raulang Company	1
Case Company, J. I.	43
Hebard & Company, W. F.	43

TRAILERS, INDUSTRIAL

Hebard & Company, W. F.	43
Nutting Truck & Caster Company	44
Rocky Mountain Steel Products, Inc.	44

TRAILERS (Motor Truck)

Fruehauf Trailer Company	4
Herman Body Company	2

TRUCKS, ELEVATING PLATFORM (Powered)

Automatic Transportation Company	Second Cover
Baker-Raulang Company	1

TRUCKS, LIFT (Hand)

Revolver Company	41
------------------	----



HOW TO PATCH FLOORS

... While Traffic Rolls

Here's a new, fast way to patch broken concrete without having to close off the area. Use durable INSTANT-USE... a tough, plastic material which you simply shovel into hole—tamp—and run traffic over immediately. NO WAITING. Bonds tight to old concrete. Makes smooth, solid, heavy-duty patch. Withstands extreme loads. Keep a drum on hand for emergencies. Immediate shipment.

Request Descriptive Folder
and Details of
FREE TRIAL OFFER



FLEXROCK Co.

260 S. 23rd St., Philadelphia 3, Pa.

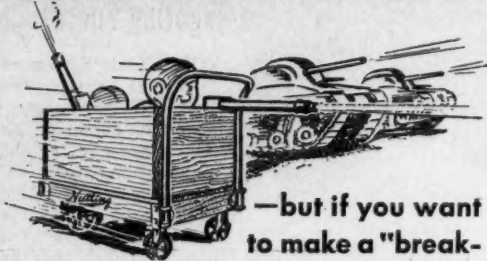
Please send me complete INSTANT-USE information... details of FREE TRIAL OFFER—no obligation.

Name

Company

Address

Don't try to make a Tank out of a NUTTING TRUCK



—but if you want to make a "break-through" on the Production Front...

lost time and wasted motions quickly surrender to the efficiency of Nutting equipment. You can definitely increase production capacity by streamlining handling of material with the type of Nutting Trucks suited to your work. A great variety of standard types are available—2-wheel, platform, bar handle, stake, rack, box, shelf, etc.



Representatives in principal cities. Consult your classified phone directory, or write direct to us for Bulletin 41-G.

NUTTING TRUCK & CASTER CO.
1163 DIVISION STREET FARIBAULT, MINN.



FLOOR TRUCK LEADERSHIP SINCE 1891

Investigate the 1000 lb. capacity ELECTRIC PONY EXPRESS

One girl replaces 6 men



Quickest stop-and-go Plant Pick-Up

Not a lift truck but America's fastest, safest factory pick-up (note operator's convenient driving position)—18 square feet platform capacity (36" x 78")—carries merchandise longer than the truck—speed to 6 miles per hour in either direction—foot operated hydraulic brakes—operates full shift without recharging or changing batteries—worm gear drive for quiet trouble-free service.

Write for catalog.

ROCKY MOUNTAIN STEEL PRODUCTS, INC.
1364 Wall Street • Los Angeles 15, California

44—D and W, December, 1943

TO MEET EXACT TRUCK NEEDS



PLATFORM and HAND NOSE TRUCKS for various Warehouse and Cargo use.

Write for details and prices.



QB Trucks with round corners, no projecting parts.



Fig. 207-A
A popular Warehouse Truck

ORANGEVILLE MFG. CO.
Orangeville (Cal. Co.), Pa.

TRUCKS, PLATFORM (Hand)

Mercer-Robinson Company, Inc.	39
Nutting Truck & Caster Company	44
Orangeville Manufacturing Company	44

TRUCKS, PLATFORM (Powered)

Automatic Transportation Company	Second Cover
Baker-Raulang Company	1
Rocky Mountain Steel Products, Inc.	44

TRUCKS, SPECIAL (Hand)

Nutting Truck & Caster Company	44
--------------------------------	----

TRUCKS, STEVEDORE

Nutting Truck & Caster Company	44
Orangeville Manufacturing Company	44

WHEELS (Industrial Truck)

Darnell Corporation, Limited	37
Nutting Truck & Caster Company	44

New Packaging Paper

One of the most serious problems of Government contractors has been the satisfactory packaging of machine parts for overseas transport.

It has been a problem of protecting the parts against salt water, corrosion, climatic and atmospheric changes. Papers have had to stand rough handling and yet permit speed and ease of wrapping.

A paper that has proven exceptionally useful and is said to meet all Government specifications for greaseproof non-corrosive papers is KD8-C-17 distributed by Criterion Paper & Twine Co., New York City.

This paper is not only greaseproof and non-corrosive but it can be heat-sealed into bags. It is approved by Forest Laboratories, Government testing agency.

It is available in a range of stock sizes, ready for immediate delivery. Sample will be sent on request. Write Criterion Paper & Twine Co., 345 W. 36th St., New York, N. Y.

Not All Products Are Hard to Get

Today many manufacturers and sub-contractors have in part fulfilled their war contracts and within the near future may be expected to resume on a small scale production of certain essential civilian goods. Therefore, it will be more essential than ever for management to keep abreast of new developments. Watch these pages for further information.

Don't assume you can't get equipment—Inquire

BIRMINGHAM, ALA. 1880—Sixty-three Years of Service—1943

HARRIS TRANSFER & WAREHOUSE CO.

• 8 South 13th St., Birmingham 1

— FIREPROOF WAREHOUSES —
Merchandise and Household Goods

• STORAGE • CARTAGE • DISTRIBUTION • FORWARDING
Pool Cars Handled

Member of A.C.W.—A.W.A.—N.F.W.A. Agents for Allied Van Lines, Inc.

BIRMINGHAM, ALA.

STRICKLAND TRANSFER & WAREHOUSE CO.

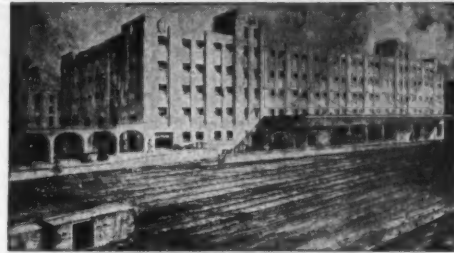
1700-1702 2nd Ave. So.

General Merchandise Storage and Distribution
Pool Car Service a Specialty—Motor Truck Service
Centrally Located—Free Switching from All R.Rs.



LITTLE ROCK, ARK.

Arkansas' Largest Warehouse
Merchandise—Household Storage



Absolutely
Fireproof
Low
Insurance
Rates
Pool Car
Distribution
Compartment
for household
Goods

TERMINAL WAREHOUSE CO.

LITTLE ROCK ARKANSAS

Member American Warehousemen's Association
American Chain of Warehouses

Agent for Allied Van Lines, Inc.



BIRMINGHAM, ALA.

WITTICHEN

Transfer & Warehouse Co.
Fireproof Warehouse
Household Goods and Merchandise

Pool Car Distribution

Member: A.W.A. & M.W.A.



BONDED



DOTHAN, ALA.

SECURITY BONDED WAREHOUSE

500-501 East Commerce St.

SERVING

S.E. Alabama
S.W. Georgia
N.W. Florida

POOL CAR DISTRIBUTION

Receiving—STORAGE—Handling.
Motor Freight Service to all points.
6-car Private Siding. Reciprocal Switching.
Efficient—Conscientious Branch House Service.

MOBILE, ALA.

Merchants Transfer Company

HEAVY HAULING—STORAGE

Pool Cars and General Merchandise—Bonded

Authorized Transfer Agents

A.T.&N., G.M.&N., L.&N., M.&O. &
Southern Railroads. Pan Atlantic S/S Corp.

LOS ANGELES, CAL.

STORAGE
DISTRIBUTION
TRANSPORTATION

The



CALIFORNIA WAREHOUSE

1248 WHOLESALE ST.

Merchandise Exclusively

LOS ANGELES

Sprinklered—A.D.T.

LOS ANGELES, CALIF.

COLYEAR'S VAN & STORAGE CO.
415 S. SAN PEDRO ST. • LOS ANGELES 13



**NORTH AMERICAN
VAN LINES, INC.**

Long Distance Moving

LOS ANGELES, CAL.

PROMPT REMITTANCES

CROWN TRANSFER & STORAGE CO.

1201 E. 5th St.
Los Angeles

45 So. Arroyo Parkway
Pasadena

SHIPPING TO AND FROM ALL EASTERN CITIES
POOL CAR DISTRIBUTION—L.C.L. SHIPMENTS

We specialize in transferring household goods for company personnel.
R. T. CHRISTMAS THREE DECADES OF SERVICE

LOS ANGELES, CAL.

AN "ASSOCIATED WAREHOUSE"

DAVIES WAREHOUSE COMPANY

GENERAL OFFICES: 164 SOUTH CENTRAL AVE., LOS ANGELES 12

First merchandise warehouse in Los Angeles—and STILL
the FIRST . . . Established 1893 . . . MORE THAN
ORDINARY SERVICE . . . We invite inquiries relative to
your warehouse problems.

MEMBERS: A.W.A. SINCE 1898 . . . C.W.A. . . . L.A.W.A.

LITTLE ROCK, ARK.

COMMERCIAL WAREHOUSE CO.

801-7 East Markham Street

A Complete Branch House Service - - Fire-
proof Sprinklered - - Low Insurance - -
Private Railroad Siding - - Quick Service.

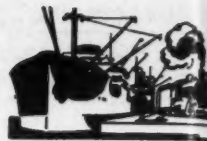
Represented by
NEW YORK ALLIED DEFENDITION INC. CHICAGO
11 WEST 42ND ST. PHOEN. 4-0946 6325 NEWBERRY AVE. CHICAGO



LOS ANGELES, CAL.

Completely Equipped
Merchandise
LOS ANGELES WAREHOUSE CO.
316 Commercial Street
Household Goods

Waterways and Terminals...



Construction of New Warehouse Space Now Well Under Way on West Coast

SAN FRANCISCO—Army and civilian transportation leaders on the Pacific Coast have been faced for some time with an increasing shortage of warehouse space for dry merchandise. Now solution of the problem, partially by the end of the year, wholly by next spring, is promised in word from Washington that an expanded warehouse construction program is under way.

In San Francisco, one of the greatest sufferers for want of warehouse space, it has been known for some time that the Government was constructing large warehouses. Now the location of the modern structures is identified as China Basin in this city. Several million dollars (the figure has been given as high as four million dollars) is reported as the cost of the China Basin warehouse project. Because of the interest of the military in the warehouse space, no one is giving out exact information.

5,000,000 Boxes of Oranges

An orange crop 33 per cent larger than the 1943 harvest must be handled this year by the transportation industry. California's 1944 naval orange crop which went to market just before Thanksgiving Day is estimated as 5,000,000 boxes larger than the 1943 crop.

The orange shortage has existed since May 1, according to Paul S. Armstrong, general manager of the California Fruit Growers' Exchange, and resulted from Government orders taking more than 20 per cent of the 1943 crop for lend-lease and the armed forces. Heavy buying power has also boosted demand. Transportation and warehouse space may be taxed by the big crop, but all concerned feel it can be handled.—Gidlow.

With the completion of the first of the facilities early in December, and of the

entire project by March or April, 1944, transportation officials here believe that both the Government and private enterprise will find itself comfortably supplied with all the necessary dry warehouse space, now and in the future. The present problem bothering transportation agencies on this Coast is achievement of balance between unloading labor and the time freight cars are left standing at ports with loads awaiting shipment. (Gidlow)

Terminal Charges Upped In Pacific Northwest

Not the March, 1942, ceilings, but present charges and a surcharge, may be made by wharf and terminal operators in Washington and Oregon under a new OPA ruling for these states. The ruling allows charging of the present official terminal tariffs for services instead of the March, 1942, rates and a 20 per cent surcharge put in effect in that base month. The change, which was claimed to conform schedules to trade practices, was asked by the industry and, it is said,

LOS ANGELES, CAL.

METROPOLITAN WAREHOUSE CO.

Merchandise Warehousing
and Distribution

Reinforced Concrete Sprinklered
Building—A.D.T. Alarm

Centrally Located in Metropolitan Area

Fire Insurance Rate 11.7 Cents

1340-1356 EAST SIXTH STREET
LOS ANGELES 21

1305 First National Bank Bldg.
CHICAGO



Offices for Rent

Telephone and Secretarial Service

Basement Cooler Room

Contact in your community representative of the A.T. & S.F. Ry.

MEMBER
C.I.W.A. L.A.W.A.

LOS ANGELES, CAL.

Overland Terminal Warehouse

Served by



1807 East Olympic Blvd.

General Merchandise Storage

Sprinklered—A.D.T.

U. S. Customs Bonded Warehouse No. 11
Cool Room Accommodations

For Complete Information Write Us Direct
or Handle with Our Associates

CROOKS TERMINAL WAREHOUSE, INC.

CHICAGO
483 W. Harrison St.

NEW YORK
271 Madison Ave.

KANSAS CITY
1104 Union Ave.

Or Nearest General Agency Union Pacific Railroad

LOS ANGELES

Member
N.W.A.-C.V. & S.A.



Serving all of California

LYON

VAN & STORAGE CO.

1950 SOUTH VERMONT AVE. • LOS ANGELES

LOS ANGELES, CAL.

Estab. 1918

PACIFIC COMMERCIAL WAREHOUSE



INCORPORATED
MERCHANDISE STORAGE
AND DISTRIBUTION

923 EAST THIRD STREET
Los Angeles, California

SPACE NOW AVAILABLE FOR STORAGE OF DEFENSE MATERIALS

We specialize in package merchandise and solicit the handling of your volume of defense materials which are moving to the Pacific Coast. Advise your requirements and we will give you an outline of services and rates.

LOS ANGELES, CAL.

1817-1855 INDUSTRIAL STREET

Star Truck & Warehouse Co.

COMPLETE FACILITIES

EFFICIENT SERVICE

Storage

SPRINKLERED—A.D.T.

Drayage

Distribution

Represented by Distribution Service

240,000 Square Feet

117 Pieces Motor Equipment

New York

Chicago

San Francisco

LOS ANGELES, CAL.

W. E. TEAGUE, Pres.
B. F. JOHNSTON, Gen. Mgr.

UNION TERMINAL WAREHOUSE

General offices, 737 Terminal St., Los Angeles 14

Free and U. S. Customs bonded storage. The largest, most complete and efficient Warehouse and Distribution Service in the West. Insurance Rate as low as 11.5 cents per \$100 per year. Daily motor truck service to all parts of the city and Los Angeles Harbor.

SACRAMENTO, CAL.



LAWRENCE

Warehouse & Distributing Co.
STORAGE

MERCHANDISE — HOUSEHOLD GOODS
POOL CAR DISTRIBUTING — DRAYAGE
Your Detail Handled as You Want It
20th & JAY STS. P.O. BX. 1194

LOS ANGELES, CAL.

Member A.W.A., C.W.A., L.A.W.A.

ONLY WESTLAND WAREHOUSES

Offer You Neutral Switching To All Railroads In Pacific Southwest

Exclusive Los Angeles Junction Railway Service.

WESTLAND WAREHOUSES, INC.
4814 Loma Vista Ave. Los Angeles

Located in Central Manufacturing District.

Low Insurance Rates.

Minimum Storage and Distribution Costs.

Write For Booklet



SACRAMENTO, CAL.

ARTHUR E. TRAVIS, Owner

WESTERN VAN & STORAGE CO.

1808-22nd St.

Sacramento, Cal.

Merchandise and household goods Warehouse

Specializing in General Merchandise, Hops and Flour. Private Siding on S.P.R.R.—10-Car Capacity. Distribution of Merchandise and Household Goods Pool Cars.

SAN FRANCISCO, CALIF.

"Where the West begins and Distribution starts."



GIBRALTAR WAREHOUSES

201 California St., San Francisco 11

OPERATED IN CONJUNCTION WITH

OVERLAND FREIGHT TRANSFER CO.

AND
TILDEN SALES BUILDING

OAKLAND, CAL.

SINCE 1900

GENERAL MERCHANDISE
Warehousing—Distributing—Draying

HOWARD TERMINAL

95 Market Street
Warehouses Steamer Piers



SAN FRANCISCO, CAL.

HASLETT WAREHOUSE COMPANY

240 Battery Street, San Francisco 11

Largest and most complete storage and trucking service on the Pacific Coast.

Operating in San Francisco, Oakland, Stockton and Sacramento

S. M. HASLETT - President

Member: American Warehousemen's Assn.
American Chain of Warehouses, Inc.

will result in no increase on the average in cost of the services covered. Included are handling, loading, wharfage and similar terminal services. (Gidlow)

**Freight Rates Reduced
On Cuban Sugar**

Reduced freight rates on raw and refined Cuban sugar imported to the United States Atlantic and Gulf ports have been by the War Shipping Administration.

Through lowering of surcharges, reductions of from four to 18c. per 100 lb. were effected. The sharpest reductions were made on rates for cargo to be discharged in U. S. Atlantic ports.

Raw sugar may be transported to Atlantic ports north of New York from the north side of Cuba for 35c. per 100 lb. with a 36 per cent surcharge. Charges on sugar bound for the same destination but loading on the south side of Cuba would be 38c. per 100 lb. with a surcharge of 34 per cent.

Sugar from the north side of Cuba may be transported to Palm Beach, Fort Pierce, Port Everglades, and Miami for 26 cents per 100 lb. with a surcharge of only 25 per cent.

Differentials of from one to three cents per 100 lb. apply whenever two ports are used for loading, and the charges for refined sugar are two cents per 100 lb. higher, plus the surcharges announced.

**Eastman Commends Great Lakes Carriers
And Urges Continued Operation of Ships**

Commending the "splendid" record of Great Lakes carriers, Joseph B. Eastman, director, ODT, has addressed a request to operators of Great Lakes vessels urging each operator to keep his ships fully employed as long as possible in transporting essential iron ore, coal, grain and limestone. Mr. Eastman's message said:

"We are now entering the critical period in lake transportation which will determine whether or not the essential amounts of iron ore, coal, grain, and limestone will be transported this season.

"These commodities are all of such basic importance to the war effort that it is imperative that everything possible be done to transport these essential quotas. Therefore I am urging each vessel operator on the Great Lakes to do his utmost during the closing weeks of the season to keep his ships fully employed as long as possible, consistent with sound operating practice and with regard to the safety of life and property. The lake carriers have made a splendid record thus far, and I am sure that they will respond to the full extent of their ability."

**Waterfront Employers
Merge in California**

California now has one waterfront employers' group for dealing with labor instead of two. The Waterfront Employers' Assn. of California merges the waterfront employers groups that formerly operated separately in Northern and Southern California into one non-profit corporation and the Secretary of State's office has been asked to authorize the merger.

The consolidated employers' group expects to work for uniform policies among

employers on longshore working conditions. It will give employers a stronger bargaining body too. Application for the approval of the Secretary of State was signed by Frank P. Foisie, president of the San Francisco organization, and J. B. Banning, Jr., president of the southern California body. (Gidlow)

Army-Navy E

The Army-Navy E, for excellence, has been awarded to the Highway Trailer Co., Edgerton, Wis., for outstanding achievement in war production.

MATERIALS HANDLING?



To facilitate transfer of air express from truck to plane when "cargoliner" service was inaugurated recently between New York and San Francisco, a roller gravity conveyor was employed.

Standard equipment for rail express handling, the lightweight magnesium conveyor is shown at departure of the first completely-converted cargo DC-3 placed in service. Passenger equip-

ment has been replaced with reinforced floors, plywood sidings, screened windows and sorting bins. Capacity is 6,000 lb.

Editor's Note: The foregoing statement, supplied with the photo by Railway Express Agency, leaves something to be desired. It doesn't state the airline that operates the cargoliner, nor does it explain why it should be necessary for three men to handle packages while on the conveyor. One of the purposes of materials handling equipment is to release manpower for other essential jobs and to lessen the need for manual handling. While one of the objects of this publicity release may have been accomplished, namely, to make people conscious of air express, shippers are not likely to be impressed by the efficiency of the agency.

Federal Warehouse Co. Joins Interlake Terminals

Federal Warehouse Co., 915 N. S. Jacinto St., Houston, 2, Texas, has become affiliated with Interlake Terminals, Inc., H. J. Lushbaugh, manager of the Interlake chain recently announced. C. S. Hackney is president of the Houston warehouse which is well known in the southwest for its general merchandise storage and pool car service.

Acquires Rights

Koppers Co. in Pittsburgh has purchased the physical assets of Coated Products Corp. at Verona, Pa., acquiring all rights to the "Plastipitch" process of weather proofing and corrosive proofing of prefabricated metals and steel shapes.

SAN FRANCISCO, CAL.

MARKET STREET VAN & STORAGE

TIM GRIFFIN, Pres. JIM CUMMINS, Sec.-Treas.
1875 Mission St., San Francisco 3
Efficient and Prompt Service



Operating 3 Warehouses; total space 90,000 sq. ft. Low Insurance Rates; Accessible to all Railroads; Sprinkler System, Vault Storage, Pool Cars Distributed.
Members NFWA, Agent Allied Van Lines, Inc.

STOCKTON, CAL.

CHAS. C. WAGNER, Pres.

PACIFIC STORAGE CO.

517 N. Hunter St. Stockton, Cal.
Merchandise—Household Goods—Drayage



Ship thru the PORT OF STOCKTON for economical distribution in Central California.
Intercoastal Terminal Rates apply at Stockton.

SAN FRANCISCO, CALIF.

PEETERS VAN & STORAGE SERVICE
4050 24TH ST. • SAN FRANCISCO



NORTH AMERICAN VAN LINES, INC.
Long Distance Moving

DENVER, COLO.



THE BANKERS WAREHOUSE COMPANY
TELEPHONE MAIN 5239 • 2145 BLAKE STREET • DENVER, COLORADO

MERCHANDISE STORAGE — POOL CAR DISTRIBUTION
A.D.T. Protection—Private siding C. B. & Q.—U.P. Also operate Warehouse at Brighton, Colo.

Represented By
Associated Warehouses, Inc.—Chicago & New York City

SAN FRANCISCO, CAL.

Member:
American Warehousemen's Association
Distribution Service, Inc.

Complete Warehousing SERVICE



General Merchandise
United States Customs
and
Internal Revenue Bonded Storage.
Draying and Pool Car Distribution.
Office Accommodations
and
Telephone Service.

SAN FRANCISCO WAREHOUSE COMPANY
625 Third Street Sutter 3461

DENVER, COLO.

SPACE AND OFFICES NOW AVAILABLE

Sprinklered thruout, Free Switching
Pool and stop over cars stored or distributed
Centrally located

KENNICOTT WAREHOUSES INC.

1700-16 Street

Denver, Colo.

The Economy of Traffic Management

ITS importance to executives everywhere is explained by a traffic expert on page 11 in this issue. It is worth more than passing attention.

Why Should We Keep
it DARK

?

IN THE DENVER AREA
WE SERVE
YOU BEST!



Modern, Fireproof Warehouses.
Offices and Special Services.
17-Car Sidings. Free Switching.
Financial Responsibility.

Write, wire or telephone.

NORTH DENVER
Transfer & Storage Co.

Office 2016 BLAKE ST. . . . DENVER, COLORADO

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PENN. 6-0968 1529 NEWBERRY AVE. MON. 5531

CALIFORNIA—COLORADO—CONNECTICUT

DENVER, COLO.

WEICKER Complete Service

- ★ Mds. & Hhg. Goods Storage
- ★ Pool Car Distribution
- ★ Moving, Packing, Forwarding

We Operate the Weicker Transportation Co., a statewide, daily motor freight service under regulation of the Public Utilities Com. Connection with Interstate Truck Lines to Principal Cities.

BURGLAR PROOF SILVER VAULTS, CEDAR LINED RUG VAULT, FUMIGATING VAULT, PRIVATE LOCKERS



THE WEICKER TRANSFER & STORAGE CO.

1700 Fifteenth, Denver 17, Colo.

Member of N.F.W.A.—A.C.W.—A.W.A.

PUEBLO, COLO.



BURCH WAREHOUSE AND TRANSFER CO. INC.

General Office and Warehouse
200 SO. SANTA FE AVENUE
Modern Sprinklered Fireproof Building
Freight Forwarding and Distribution
Household and Merchandise Storage
PACKING AND SHIPPING

Member of May.W.A.—A.W.A.—Colo. W.A.

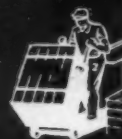
PUEBLO, COLO.

128-130 SOUTH MAIN

WEICKER TRANSFER & STORAGE CO.

- Modern Sprinklered Building
- Pool Car Distribution
- Household and Merchandise Facilities
- Freight Forwarding and Distribution

★ AGENT ALLIED VAN LINES—



BRIDGEPORT, CONN.



The Bridgeport Storage Warehouse Co.
General Offices 10 Whiting St.

General Merchandise Storage and Distribution
Total Storage Area 67,000 Sq. Ft.
Household Goods, Moving, Packing and Shipping
N. Y., N. H. and H. R.R. Siding



BRIDGEPORT, CONN.

E. G. Mooney, Pres. J. G. Island, V. Pres.

HARTFORD DESPATCH
and WAREHOUSE CO., Inc.

1337 SEAVIEW AVENUE, BRIDGEPORT, CONN.
U. S. Bonded Warehouses . . . Pool Car Distribution . . . Household and Merchandise facilities . . . Private Siding . . . Our fleet covers Connecticut and Massachusetts daily. Warehouses at Hartford, Conn., and Springfield, Mass.

Members: NFWA—AWA—ACW—AVL Agents

BRIDGEPORT, CONN.

WEST END MOVING & STORAGE CO.
764 HOWARD AVE. • BRIDGEPORT



NORTH AMERICAN
VAN LINES, INC.
Long Distance Moving

HARTFORD, CONN.

E. G. Mooney, Pres. J. G. Island, V. Pres.

HARTFORD DESPATCH
and WAREHOUSE CO., Inc.

410 CAPITOL AVENUE, HARTFORD, CONN.
U. S. Bonded Warehouses . . . Pool Car Distribution . . . Household and Merchandise facilities . . . Private Siding . . . Our fleet covers Connecticut and Massachusetts daily. Warehouses at Bridgeport, Conn., and Springfield, Mass.

Members: NFWA—AWA—ACW—AVL Agents

Shippers' Convenience, States, Cities and Firms are Arranged Alphabetically

D and W, December, 1943—49

CONNECTICUT—DISTRICT OF COLUMBIA

HARTFORD, CONN.

NATIONWIDE DESPATCH & STORAGE CO.

9 CENTER ST., HARTFORD 8, CONN.

15,000 Sq. Ft. of space—specializing in Household Goods and Industrial and commercial, local and long distance moving and rigging. Hhg. goods loads insured. Consign shipments via N.Y., N.H. & H. R.R. Members: Conn. Motor Truck Assn., Independent Movers and Warehousemen's Assn., Hartford Better Business Bureau.

HARTFORD, CONN.

Established 1902

SILLENCE

Warehouse Co., Inc.

HOUSEHOLD GOODS EXCLUSIVELY

Fireproof Warehouses

MEMBER MAYFLOWER WAREHOUSE ASSOCIATION

NEW HAVEN, CONN.

M. E. KIELY, Pres.

DAVIS STORAGE COMPANY

335 East St., New Haven, Conn.
Modern Fireproof Merchandise Warehouse
Private seven-car siding, adjacent to Steamship and R. R. Terminals. Pool and stop over cars distributed. Merchandise Storage.
Motor Truck Service to all towns in Connecticut.
Low Insurance Rate. Prompt, Efficient Service.

Member of Connecticut Warehousemen's Assoc.

NEW HAVEN, CONN.

NEW HAVEN TERMINAL, INC.

30 Waterfront St., New Haven, Connecticut

Truck, Rail and Deep Water Terminal Warehouse—45 car siding—open storage.

Pier 500 ft. long—2 Berths—28 ft. M.L.W.

ADT Watchman and Fire Alarm Service

Member NATIONAL FURNITURE WAREHOUSEMEN'S ASSN.
Agent ALLIED VAN LINES, Inc.

STORAGE and DISTRIBUTION



Merchandise, automobiles, furniture—23 buildings—ADT supervised watchman service—Low insurance rates—15 car siding—Central location—Daily truck delivery service covering Connecticut and southern Massachusetts—Bonded with U.S. Customs.

THE SMEDLEY CO.

165 Brewery St., New Haven, Conn.

Members: AWA, NFWA, CWA, New Haven Chamber of Commerce, Hauling Agent Allied Van Lines, Inc.



NEW HAVEN, CONN.

PAUL A. DAHLGARD, Owner

West Haven Trucking Company

Storage Warehouses

Offices, 435 Congress Ave., New Haven 11

Moving and Storage of Household Goods Exclusively

Member Connecticut Warehousemen's Association



TORRINGTON, CONN.

Established 1860

The E. J. Kelley Co. Storage Warehouses

Main Office, Torrington, Conn.—Telephone 9243
One of New England's Largest Transportation Companies

Household Goods Packed, Stored, Shipped.

Merchandise Storage and Distribution.

Pool Cars Distributed in All Parts of Connecticut.
Branch Offices in Bridgeport, Hartford, New Haven & Waterbury, Conn.; Springfield & Worcester, Mass.



Sulphur . . .

(Continued from page 10)

2,000,000 tons a year. We consume over 30 lb. of sulphur per year for every man, woman and child in the nation.

When we took Sicily we clipped off the only other large producer of this vital product in the world. Sicily could furnish about 350,000 tons a year. Germany itself could not squeeze out more than 100,000 tons and Japan, praise the Lord, can eke out only about 175,000 tons a year.

Outside of Sicily, the U. S. practically controls the world's sulphur supply, and now Sicily is in Allied hands.

Funny thing about sulphur. Until 1894, Sicily enjoyed a world monopoly on this amazing element. We knew we had sulphur. Our pioneer oil men discovered it in the domes on the Gulf Coast in Louisiana and Texas. But until that year, no economical means had been discovered for removing it from the ground.

Herman Frasch originated the process by which the U. S. passed the Sicilian producers in a few short years. He tried pumping hot water deep into the bowels of the earth where borings revealed the presence of sulphur. His theory was that the hot water would melt the sulphur, permitting it to be pumped to the surface in liquid form.

His idea worked. Today Uncle Sam

is the big shot in sulphur. Texas produces about 83 per cent of our supply. Louisiana produces about 16 per cent, making 99 per cent of our output concentrated on the Gulf Coast.

Before the war the mountains of yellow sulphur required by industry were moved by coastwise ships from Texas and Louisiana to Eastern seaboard industries and to Canadian factories, and, at that time to other countries. Now only our Allies get sulphur.

When war hit, however, the rails were compelled to take up part of the burden and our inland waterway barges the balance. Today, through the Intra-coastal Canal and on up the Mississippi River as far as the Twin Cities vast armadas of this yellow gold of industry move steadily. Some goes up the Illinois River to Chicago for mid-continent industries. A great quantity is transferred at Chicago into lake steamers for Canadian destinations and for Great Lakes and Eastern ports. Some goes up the Ohio River into the Pittsburgh district.

Nine barge lines will handle over 1,000,000 tons this year: Federal Barge Lines, American Barge Lines, Campbell Transportation Co., Coyle Lines, River Terminals Corp., Red River Barge Line, Union Barge Line and John I. Hay Barge Line.

The sulphur is loaded at the mine tipplers direct into these barges and is transferred at the end of the barge route either to the industries' stockpiles direct

or to railroad cars or lake steamers. Each barge can carry from 600 to 2,000 gross tons and the average tow will run from four to six barges.

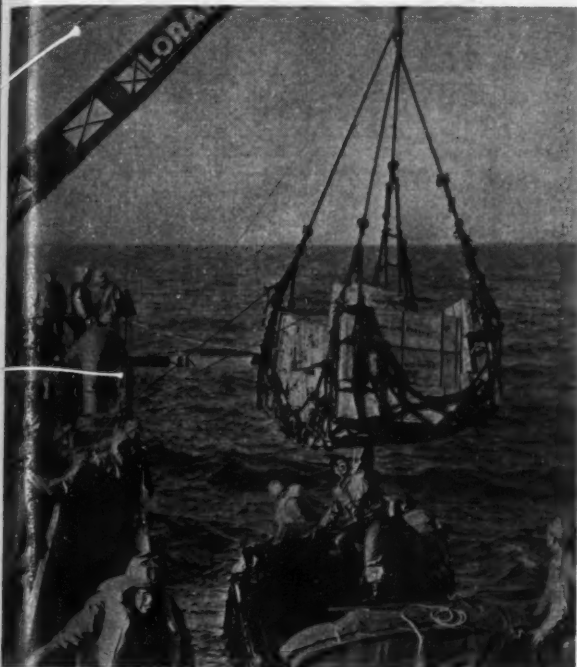
In 1942, the movement of sulphur by barges was increased about one-third over the 1941 volume and 1943 will undoubtedly double that.

So salute the cars and barges and steamers in which you see the yellow mineral. It is more valuable to us than that other yellow mineral, gold, that we always hold in such high esteem.

Butler Bros. Changes Its Distribution System

The requisitioning by the U. S. Coast Guard of the 8-story Butler Bros. warehouse in Jersey City, N. J., has forced important changes in the distribution system of this big wholesale drygoods establishment, T. B. Freeman, company president, has announced from the concern's Chicago headquarters. After mid-December, Mr. Freeman said, all goods, except floor coverings and women's ready-to-wear will be shipped to customers in the New York area from Butler's Baltimore distributing house. In New York City the company will continue operations of its leased building at 860 Broadway, primarily for servicing the Ben Franklin and Federated chain stores, and also in selling to other accounts, he said. (Slawson)

That Amphibious Truck, the 'Duck'



The 'duck' is capable of hauling troops and equipment ashore or across water of any depth. It can carry 35 men on land, and 50 or more by water, depending on the free-board required.

(Approved by War Department, Bureau of Public Relations)

A 'duck' taking on a load of shells from an Army supply ship. These amphibious trucks have already seen action in the South Pacific war theater, and have repeatedly demonstrated their practical value and versatility.

WASHINGTON, D. C.



FEDERAL STORAGE COMPANY

1701 FLORIDA AVENUE, WASHINGTON 9

E. K. MORRIS, President (See Page Advertisement Directory Issue)
Member—NFWA, AVL, WWA, CS&TA, DCTA

WASHINGTON, D. C.

Maurice Kressin, Mgr.

Manhattan Storage & Transfer Co.

639 New York Ave., N.W., Washington 1, D. C.
Household Goods storage, packing, shipping. Pool Car Distribution Merchandise.

Lift vans local delivery.

Member Ind. Movers & Warehousemen's Assoc.

WASHINGTON, D. C.

GENERAL MERCHANDISE STORAGE

Pool Car Distribution

Direct Switching Connections Into Warehouse
Pennsylvania Railroad

TERMINAL REFRIGERATING & WAREHOUSING CORPORATION

4th and D Streets, Southwest

Member of A. C. W.

WASHINGTON, D. C.

IN WASHINGTON..

There's always ROOM AT SMITH'S 15 WAREHOUSES

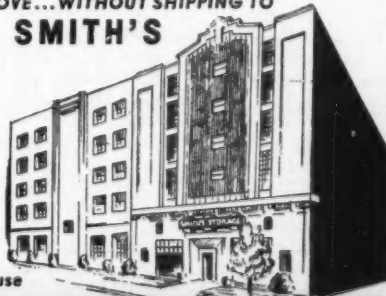
"Smith's looked ahead. They foresaw the storage needs of Washington's War-time population. They added one warehouse after another and today Smith's have fifteen large storage warehouses."

DON'T MAKE A MOVE... WITHOUT SHIPPING TO

Exclusive Agents
Aero Mayflower
Transit Co.



Our Main Warehouse



SMITH'S

TRANSFER & STORAGE CO.
1313 YOU ST. N.W. NO. 3343

DISTRICT OF COLUMBIA—FLORIDA

WASHINGTON, D. C.

Security Storage Company OF WASHINGTON

Capital, Surplus and Reserves over \$1,200,000
Security (steel) lift vans for overseas shipments. Door to door rates quoted. All risk insurance if desired.
Members, NFWA, AVL Canadian, British, French & Other Assns.
1140 Fifteenth Street, Washington 5

WASHINGTON, D. C.

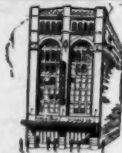
W. E. EDGAR, Supt.

THE TERMINAL STORAGE COMPANY OF WASHINGTON

First, K and L Streets, N. E.
Large buildings of modern construction, total floor area 204,000 square feet, of which 109,000 square feet is of fireproof construction.
Storage of general merchandise
CONSIGN SHIPMENTS VIA B. & O. R. R.
Heated rooms for protection against freezing.
Member of American Warehousemen's Association

WASHINGTON, D. C.

Established 1901



UNITED ★ STATES STORAGE COMPANY

418 10th St., N.W., Washington 4, D. C.
We Reciprocate Shipments
(See Advertisement in Directory issue, page 118)
Member of N.F.W.A.—W.W.A.

JACKSONVILLE, FLA.

ESTABLISHED 1901

THE SOUTH'S LARGEST FIREPROOF WAREHOUSE
EXCLUSIVELY FOR HOUSEHOLD GOODS & OFFICE EQUIPMENT
DELCHER BROS. STORAGE CO.
262 Riverside Ave. Phone 5-0140

Local & Long Distance Moving
Rug Cleaning Cold Storage For Furs

JACKSONVILLE, FLA.

FLORIDA'S LARGEST WAREHOUSE



Union Terminal Warehouse Company

700 East Union Street

Merchandise Storage—Custom Bonded—Pool Car Distribution
Reconsigning—Trucking Service—Trackage 32 Cents
Reinforced Concrete—Sprinkler System—A.D.T. Service
Insurance Rate 12 Cents

Rental Compartments—Sub-Postoffices.
Members A.W.A.—A.C.-W.—J.W.A.

MIAMI, FLA.

INTERNATIONAL BONDED WAREHOUSE CORP.

U. S. CUSTOMS BONDED
Specializing in Imported & Export Storage—Negotiable Warehouse Receipts
MERCHANDISE STORAGE
\$50,000.00 in BONDS & WAREHOUSEMEN'S LIABILITY INSURANCE
FEC RR SIDING—2 CARS
219-251 S. W. First Court (36) Tele. Miami 2-1208

TAMPA, FLA.



"Your Tampa Branch House"

CALDWELL BONDED WAREHOUSES

MERCHANDISE—HOUSEHOLD GOODS
Member American Warehousemen's Assn.

TAMPA, FLA.

**LEE
TERMINAL**
1139 Ellamae Ave.
TAMPA

Merchandise Storage
Pool Car Distribution
Commercial Cartage
Water & Rail connections
Low Insurance Rate
Household Goods Storage
Moving—Packing—Shipping
Agents Allied Van Lines
National Movers

Members: AWA—NFWA

TAMPA, FLA.

TAMPA COLD STORAGE & WAREHOUSE CORPORATION

COR. MARION & CASS STS., TAMPA 1
Loans on Stored Commodities. Sales Representation. Privately Bonded.
Pool Cars Handled.
Located in heart of Tampa. General merchandise—Cooler and sharp freezer cold storage. Efficient distribution over entire state. Field Warehousing.
380,000 Sq. Ft. of Space

TAMPA, FLA.

WILLIAM J. EVE, Manager

WAREHOUSE, INC.

BONDED

CARLOAD AND COMMERCIAL STORAGE
POOLED CAR DISTRIBUTION
Morgan and Water Streets, Tampa, Florida

Economy of Traffic Management

(Continued from page 11)

tion study prepared by a traffic department, executives have found it advisable to discard or revise their plans for building a branch plant. These are only a few of the numerous "managerial" and "policy making" angles of industry where the assistance of a traffic department is essential if the executive department is to arrive at a correct decision.

With cooperation, the executive department will not be faced with costly handling methods such as frequently exist where traffic and transportation matters have been ignored in advance. One has only to look around in any industrial community to see plants today burdened with high costs of loading, unloading and other items of transportation, weighed down with high costs which never would have arisen if the executive department had cooperated with a traffic department prior to the construction of the plants.

\$10,000 Cost Saving . . .

On the other hand, even where such handicaps exist the executive department, cooperating with a traffic department, will find that these high costs can be lowered. It has been done. For example, the executive department of a well-known firm was battling with the problem of an unreasonably high cost of handling in its receiving, shipping and stock rooms. The problem was referred to the traffic department. That department, collaborating with a materials handling equipment representative, made a study of the methods being used. As a result improvements were instituted which resulted in a yearly cost saving of over \$10,000.

That saving would not have been achieved by the executive department alone. Neither would the traffic department alone have succeeded. The materials handling equipment representative singly would not have accomplished it. But cooperation of all produced the desired result.

As applied to all other matters pertaining to traffic and transportation as well as to the specific case just related, this point should be noted: the \$10,000 yearly cost reduction was not even a potentiality until the executive department realized the need for efficient traffic department assistance and acted accordingly.

More definite and complete cooperation between the executive and traffic departments will do a great deal toward the elimination of waste in industry.

SALMON EGG OIL

Methods of extracting a valuable salmon egg oil for use in packing salmon have been worked out at an Astoria sea foods laboratory, the Oregon State College experiment station has announced. The new oil will replace other types formerly used and now difficult to obtain. Extraction previously had been impractical because of the large protein content which hardened with heat and precipitated when diluted with water. (Haskell)

ATLANTA, GA.

AMERICAN BONDED WAREHOUSE
Affiliated with
SOUTHEASTERN BONDED WAREHOUSES
"Better Warehouse Service"

651-653 Humphries St., S. W.—Sou. R. R.
Merchandise Warehousing Pool Car Distribution
Sprinklered A.D.T. Burglar Protection A.W. Am.



SAVANNAH, GA.

Savannah's only bonded warehouse
SAVANNAH BONDED WAREHOUSE & TRANSFER COMPANY.

BAY STREET EXTENSION & CANAL,
Post Office Box 1187
General Storage—Distribution—Reconsigning
Custom House Brokers—Custom Bonded
Regular steamship service from principal
Eastern, Western & Gulf ports—track con-
nections with all rail and steamship lines.
R. S. Young, President.
F. J. Robinson, Vice-President.
Members—A.W.A.—A.C.W.



ATLANTA, GA.

SAVANNAH, GA.

BENTON RAPID EXPRESS

The Fastest Freight Service Between Atlanta and Savannah and Intermediate Points
CUSTOMS BONDED AND INSURED
Ask us to quote on all kinds of shipments received from and delivered to Steamship Lines—Serving the Port of Savannah

Principal Office
1 Victory Drive,
Savannah

Atlanta Office
220 Houston St., N. E.

HONOLULU, HAWAII

WHEN SHIPPING GOODS TO

HONOLULU

Consign to us and the same will be given our best attention.
Modern Concrete Warehouses. Collections promptly remitted.
Correspondence Solicited

CITY TRANSFER COMPANY

Cable Address: LOVERINO, HONOLULU

ATLANTA, GA.

"Atlanta's Largest"

MONROE BONDED WAREHOUSES

175 SPRING ST., ATLANTA 3
Invested Capital \$325,000

Lowest Warehouse Insurance Rate in Atlanta
MERCHANDISE—COLD STORAGE—TRUCKING
Private Railroad Sidings—Concrete Warehouses
A.D.T. Service Member: A.W.A.

CHICAGO, ILL.

ACE WAREHOUSE CO.

417 W. Ohio Street
372 W. Ontario Street

The Warehouse with Personal Contact
Modern Buildings Low Insurance



ATLANTA, GA.

PEACHTREE MOVING & STORAGE CO.

975 Peachtree St., N. E.

Specializing in the Storage of Household Goods and Office Furniture

Long distance Moving—New furniture dealer. Transfer of Household Goods.

CHICAGO, ILL.

The Distributors' News Group

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PENN. 6-0968 1525 NEWBERRY AVE., MON. 5531



Member **AMERICAN WAREHOUSEMEN'S ASSOCIATION**



DOWNTOWN WAREHOUSE

Most Centrally Located

2 Blocks from New Union Station
Canal & Harrison Sts.

CHICAGO, ILL.

Tunnel and Trap Car Service

Liberal Loans Made on Staple Commodities

OPERATING SPACIOUS STORAGE WATER DOCK FACILITIES AT THE NAVY PIER

CROOKS TERMINAL WAREHOUSES

CHICAGO

NEW YORK OFFICE: 271 MADISON AVENUE

KANSAS CITY

SOUTH SIDE WAREHOUSES

5801-5967 West 65th St.

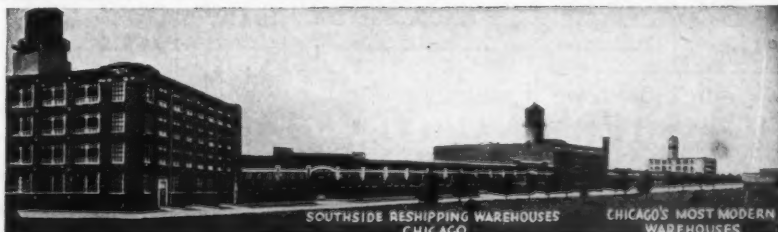
CHICAGO, ILL.

Capacity 1200 Carloads

Insurance Rates as Low as 12c

OPERATING SPACIOUS WATER FRONT WAREHOUSE AT 103RD STREET & CALUMET RIVER

Also operate three modern warehouses in Kansas City and the Overland Terminal Warehouse Company at Los Angeles, California



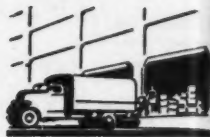
SOUTHSIDE RESHIPING WAREHOUSES CHICAGO

CHICAGO'S MOST MODERN WAREHOUSES

For Shippers' Convenience, States, Cities and Firms are Arranged Alphabetically

D and W, December, 1943—53

Cold Storage...



Expanded Post-War Markets Predicted For Refrigeration and Dehydration

MONTREAL—The problem of feeding Allied troops in the invasion of North Africa and Italy was solved in advance on this side of the Atlantic when small cold storage rooms were individually constructed, filled with frozen food, and hoisted aboard ship to make the long sea voyage, the mechanism in each unit humming all the way across the Atlantic and the Mediterranean. The huge refrigerators were landed after the beaches had been secured and, presumably, are still being used, as each unit is independent of any power supply and requires only gasoline for operation.

Speaking before the Electrical Club in Toronto, W. Smallwood, Canadian General Electric Co. executive stated that he was not at liberty to reveal all the wartime contributions being brought about by refrigeration and dehydration experts, but he predicted that the preservation and condensation of food would have a

tremendous post-war growth which would be enhanced by the food needs of currently Axis-occupied countries.

While he was not yet prepared to agree with all the claims put forward for home dehydration cabinets, he predicted a post-war demand for individual farm freezers whereby, at low cost, fresh meat could be preserved. He said that, in the past 10 years, mechanical refrigeration efficiency has been brought to the point where a domestic refrigerator can be operated for about 35c. a month with 50 per cent more refrigeration.

In wartime industry, mechanical refrigeration has been responsible for increased production and a sharp decrease in scrapped parts, he said. This has been applied to welding, cooling of hot shell casings, improving the temper of metals, testing the defects in shells. Formerly, aluminum rivets used in the aviation industry had to be driven soon

after forming because they aged and became too hard to drive. Now they are stored in low temperature portable refrigerator cabinets, where they retain their necessary softness.

Competent authorities estimate that the food emergency will continue for ten years after the war and dehydration will play an important part, said the speaker. "In every convoy leaving for Europe, nearly half the ships are required for food. Dehydrated products require only about 10 per cent of the shipping space."

"Dehydrated vegetables in 1942 increased in volume four times over that of 1941; in 1943, a 16-fold increase is scheduled over 1942, said Mr. Smallwood. "In North America, this will mean nearly 2,000,000,000 lb. of vegetables." (Car-michael)

New Fish Freezer Plant Established in Oregon

The New England Fish Co., of Oregon, has brought into full operation recently the most advanced fish freezer and cold-storage setup of the Pacific Northwest.



ANCHOR

STORAGE CO., 219-229 EAST NORTH WATER STREET, CHICAGO, ILL.

Across the street from Tribune Tower—only 8 minutes from the Loop. The best of re-shipping facilities—direct tunnel connection with all railroads, eliminating cartage. Private switch on C&NW Railway. Delivery platform inside the building. Private dock on Chicago River. Every facility for efficient storage and distribution of your merchandise.

Represented by
DISTRIBUTION SERVICE, INC.

CHICAGO, ILL.

CURRIER-LEE WAREHOUSES, Inc.

427-473 W. ERIE ST., CHICAGO 10

Complete Facilities for Merchandise Storage and Distribution



CHICAGO, ILL.

Established 1912

Exclusive Area Agents
United Van Lines, Inc.



FERNSTROM CARTAGE AND VAN COMPANY

3547 W. MONTROSE AVE., PHONE IRVING 6074
CHICAGO, ILLINOIS
Fireproof Warehouse and Fleet of Padded Vans for Local and Long Distance Moving.

CHICAGO, ILL.

Established 1894

ANDERSON BROS. STORAGE

Household Goods Storage
3141 N. Sheffield Ave.

Agents for



Phones—Chicago, Wellington 0014 and Evanston, Enterprise 4002
Packing, Crating, Shipping. Facilities for Merchandise and Automobile Storage. Office Removals a Specialty.

CHICAGO, ILL.

CHICAGO'S LOOP WAREHOUSE C & A TERMINAL CO.

358 W. HARRISON ST.

Modern concrete building. 30 car track served by Alton-B. & O. R.R. Tunnel connection all railroads for L.C.L. shipments. Next door Parcel Post Bldg. for economical and speedy handling of Parcel Post shipments.



CHICAGO, ILL.

Member A. W. A.

Griswold-Walker-Bateman Co.

1525 NEWBERRY AVE.

CHICAGO

- Modern Buildings.
- Low contents insurance.
- Reshipping, city deliveries
- Vacuum fumigation of food stuffs, tobacco, etc.
- Cooling Rooms

- Direct track connections with C&NW, B&O, Soo Line, PM, CGW, and B&OCT Railroads.

- Write for your copy of "The Way to Distribution."

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PENN. 6-0968 1525 NEWBERRY AVE. MON. 5531

CHICAGO, ILL.

Grocers Terminal Warehouses

General Offices: 342 North Loomis Street, Chicago 7
Complete Merchandise Storage. Free and Bonded Space.
Cooler Space. Private Sidings Located on Penn., C & NW,
and CMST. P & PRR's. Free Switching. Fleet of Trucks for
City Deliveries. Specialize in distributing and warehousing
of Nationally Advertised Grocery and Drug Products.
New York Representative
GEO. W. PERKINS—82 BEAVER ST. — TEL. WHITEHALL 4-2287



CHICAGO, ILL.

Members: N.E.W.A.

Allied Van Lines

Serving Chicago & Suburbs For
Over 35 Years.

Consign Your Shipments To

JOYCE BROS. STGE. & VAN CO.

Main Office 6428 N. Clark Street
Rogers Park 0833



CHICAGO, ILL.

45 Years of Reliable Service

**Lincoln Storage and Moving Co., Inc.**

4251-59 Drexel Blvd.

Chicago, Ill.

Government Bonded Warehouse

Storage—Packing—Shipping
Local and Long Distance Moving

CHICAGO, ILL.

NATIONAL VAN LINES INC.

2431 IRVING PARK RD.

Interstate moving of H.M. goods—Nationwide agents and warehouse facilities in
all key cities. I.C.C. Permit 242866

We specialize in pool car shipments of H.M. goods want to assist in padded freight
cars—No crating necessary—Low rates. Consign your shipments to our nearest
warehouse. We will rush

TO TRAFFIC MANAGERS: Our tariff is very low. Wire or write us when trans-
ferring personnel.
New York City: 1775 Broadway Los Angeles, Calif.: 447 Commercial

CHICAGO, ILL.

MIDLAND

**A complete warehouse organization
fully equipped to handle merchan-
dise rapidly and economically**

with convenient locations for local trade and ex-
cellent transportation facilities for national dis-
tribution. Chicago Junction In and Outbound
Union Freight Station—direct connections with
thirty-eight railroads. Receiving Stations for Rail-
roads, Express and Truck Lines on premises.

Inquiries Invited on Storage, Office and Rental
Requirements

**MIDLAND WAREHOUSES, INC.**

1500 South Western Avenue,
Chicago, Ill.

which it has established at Astoria, Ore.,
close to the mouth of the Columbia River.
Designed and built for the freezing and
storing of packaged fish, the most modern
refrigeration equipment has been in-
stalled in the plant of which Henry H.
Goodrich, vice-president of the company
is general manager. (Littelljohn)

Large Bacon Shipments On Canadian Pacific

The Canadian Pacific Railway's over-
head refrigerator cars, a type pioneered
on the North American continent seven
years ago by that railroad, have handled
many tons of Canadian bacon recently
for export to embattled Britain, accord-
ing to J. H. Main, general superintendent
of transportation. There are 360 of these
overhead type cars among the 3,906 cars
in the refrigerator equipment operated
by the company.

The chief perishable traffic supervisor
explained that a close range of controlled
temperature is desired in the handling of
bacon, so that the cure may be continued
while the product is in transit. These
special cars meet this requirement it is
said, and, in addition, handle full capacity
tonnage, thus contributing to greater
car efficiency. (Carmichael)

A \$100,000 cold storage warehouse and
fruit processing plant has recently been
built by the Brewster-Pateros Proces-
sors, Inc., at Pateros, Wash. (Littelljohn)

Short Notes

Purchasing a 28-acre tract of land at
Salem, Ore., the American Can Co. in-
tends to build a new can factory in this
capitol city of Oregon, to supply cans to
packers in most of the Oregon region, as
well as to canners in Northern Califor-
nia, J. F. Abbey, district engineer on the
Pacific Coast, recently announced in
Salem. (Littelljohn)

The Addison-Miller Co., Pasco, Wash.,
has added to its cold storage facilities
and converted its cold rooms to sharp
freezers that will be able to accommodate
100 carloads of frozen peas and other
vegetables. (Littelljohn)

In normal times, an average of about
64 cars of fish, mostly salmon and halibut,
is shipped out of Prince Rupert each
month by Canadian National Railways—
most of it going to New York, Philadel-
phia, Chicago, St. Louis and other big
cities in the United States. This year,
the average has climbed to 150 cars a
month—an increase of almost 150 per
cent.

Car Loading Directive For Special Products

Special Direction ODT 18A-1 sets out
the minimum loadings for certain prod-
ucts carried at times in cold storage.

Dried Fruit: In bags, shall be loaded
to an elevation not less than 4 ft. from
the floor of the car; in boxes, shall be
loaded to a weight not less than 70,000 lb.

Milk Powder: In bulk in barrels, less
than 500 lb. gross weight each, shall be
loaded on end, two tiers high, covering
the entire floor space of the car.

Nuts: Almonds, shelled or unshelled,
in packages, shall be loaded to a weight
not less than 60,000 lb. Peanuts, shelled
in bags, shall be loaded to a weight not
less than 50,000 lb.; unshelled in bags,
shall be loaded to a weight not less than
40,000 lb.

Foodstuffs, Canned: Shall be loaded to
a weight not less than 65,000 lb.

Seven Warehouses Join National Association

The following concerns have been ad-
mitted to membership recently in the
National Assn. of Refrigerated Ware-
houses, according to Wm. O'Keefe, execu-
tive secretary.

Ayer Cold Storage, Inc., Groton St.,
Ayer, Mass. Atlas Warehouse & Cold
Storage Co., Green Bay, Wis. Granite
City Cold Storage Warehouse, Inc., 87
Penn St., Quincy, Mass. Commercial
Storage Co., Inc., 736 Florida St., Me-
phis 2, Tenn. Burkhardt & Sigman,
and Topeka, Wichita, Kan. Herm
Ice & Storage, Inc., 1130 Herr
Road, Richmond, Va. Red Cree
Storage Co., Red Creek, N. Y.

D and W, December

Offices are available
for transportation
North Pier
509 E. Illinois St.
D and W, December

Readers' Comment . . .



Foreign Trade Zones

"I have read with interest the October issue of *DandW* which contains an article by Mr. E. W. Ford, vice president, Warehousemen's Assn., Port of New York, entitled 'The Case Against Government Control of the Warehouse Industry,'" writes Thomas E. Lyons, executive secretary, Foreign-Trade Zones Board, Department of Commerce.

"Mr. Ford includes Foreign-Trade Zones in the group of facilities that would not be regulated. In this respect, the author is in error as Section 14 of the Foreign-Trade Zones Act specifically provides that such zones must be operated as public utilities, and that rates and charges must be fair and reasonable.

"The many shippers who read your publication will no doubt be interested in this information."

A Compliment

"I wish to compliment you on your method of getting subscribers," writes W. S. Walmsley, sales manager, Johnston Pump Co. "It is so different from the usual run of letters we get, and to a busy

person your letter certainly has appeal."

'Freedom and Security'

"Upon reading your editorial entitled 'Freedom and Security' in *DandW* for October," writes E. F. Mead of The Women's Traffic Club of Greater New York, "I was so impressed with it I thought I would like to quote it in the November issue of our *Trafficade*. I am writing to inquire if you will grant us permission to reprint it."

Editor's Note: Permission being given, the editorial was reprinted in the November issue of "*Trafficade*" with due credit. *DandW* considers itself honored.

'Talking Turkey'

Writing about the article that appeared on p. 9 of the November issue of *DandW*, Edw. M. Morse of the Folly Turkey Farm, Trevor, Wis., states: "Even though to-day we are not in a position to accept any new business, you may be interested in knowing that there have already been quite a number of inquiries as to the availability of our products from your readers."

Faster Handling of Air Cargo

J. G. Reinhard, advertising manager, Anthony Co., Inc., Streator, Ill., writes that the executives of his organization have long been interested in air transportation and that "this interest is now to a point where our thoughts for the post-war era may include special equipment for faster handling of freight and express by the airlines.

"We have in the stage of development, even though roughly, a system of handling express and freight for the airlines that would make loading and unloading of the largest carriers a matter of minutes rather than an hour or more."

Potts' Manual

"I have been enjoying your series of articles on materials handling equipment," writes Garrett Gething, assistant advertising manager, The Service Caster & Truck Co., Albion, Mich. "I wonder if it would be possible to get a copy of each of the series?"

Editor's Note: When the series has been completed, publication of the Manual in book form is contemplated. In



AMERICAN WAREHOUSEMEN'S ASSOCIATION

Come to North Pier Terminal



NORTH PIER TERMINAL

Largest warehouse in the Great Central Market territory.

Especially adapted for combination of office and warehouse or factory. • Splendid shipping facilities including all phases of transportation. • Rail, water, tunnel, truck. • Track capacity 150 cars. • Feet of dockage for boat unloading. • Direct free tunnel connection with all railroads. • Universal station in building for out of dock shipments. • Low insurance rates. • Heavy floor load. • Central storage division operating in separate buildings with • Storage in-transit, pool car distribution.

Available in new section at 444 Lake
Ample free parking • Good
• Close to Loop.

Terminal Co.
Chicago—SUP. 5606

CHICAGO, ILL.

For Personalized Warehousing

PRODUCERS WAREHOUSE CO.

344 No. Canal St. C. & N. W. Ry

THOMSON TERMINALS INC.

346 W. Kinzie St. C. M. St. P. & P. R. R.

Prompt Deliveries

Advances Made



AMERICAN WAREHOUSEMEN'S ASSOCIATION

RAILWAY TERMINAL & WAREHOUSE CO.

444 WEST GRAND AVE., CHICAGO, ILL.



Merchandise Warehouses close to the Loop. Direct railroad connections. U. S. Customs Bonded and free storage. Low insurance rates.

CHICAGO, ILL.

FIREPROOF CONSTRUCTION

Household Goods Storage Warehouse

REMER STORAGE & VAN CO.

5822-5824 N. WESTERN AVE.
CHICAGO 45, ILL.Commercial Hauling & Moving in Chicago
& Suburbs for 35 Years

CHICAGO, ILL.

John F. Seng
President

WABash 6883

John J. Egan
Vice-PresidentSENG WATERWAY
WAREHOUSEOne Half Million Sq. Ft.
of Modern Warehouse
Space.Warehousing-Brokers Of-
fices. U. S. Customs Bond-
ed Stores.Shipments received and
dispatched by water - rail
or truck. Private track of
Pennsylvania R. R. direct
into Warehouse. In the
heart of downtown Chi-
cago.

310 West Polk St.

One block from Main U. S. Post Office



CHICAGO, ILL.

One of Chicago's Finest

A half million feet of modern warehouse space where you
have every advantage for receiving, shipping and reship-
ping. Track space accommodates 360 railroad freight
cars. 70 ft. covered driveways practically surround the
clean, light and airy warehouse.Located on the edge of Chicago's famous Loop and only
one block from the mammoth new Post Office, Western
Warehouse is in the heart of all business activity. Write
for complete information.

WESTERN WAREHOUSING COMPANY

323 West Polk Street

Chicago, Ill.

DECATUR, ILL.

H. G. Taylor, Pres. R. C. Shumate, Treas. & Mgr.

Decatur Warehouse Company
(SHUMATE TRANSFER)555 East Wood Street
TRANSFER-STORAGE-DISTRIBUTION
MOVING-PACKING
Licensed-Bonded-Insured Carriers

HIGHLAND PARK, ILL.

RAFFERTY TRANSFER & STORAGE CO.
26 S. FIRST ST. • HIGHLAND PARKNORTH AMERICAN
VAN LINES, INC.
Long Distance Moving

JOLIET, ILL.

Telephone 4381 and 4382

Joliet Warehouse and Transfer Company

Joliet, Illinois

MERCHANDISE STORAGE AND DISTRIBUTION

Best distributing point in Middle West

Located on five Trunk Lines and Outer Belt
which connects with every road entering Chicago.

No switching charges.

Chicago freight rates apply.



CHICAGO, ILL.

For Distribution in CHICAGO Use

SYKES SERVICE

Fully sprinklered warehouse building for merchandise
storage exclusively.Centrally located—only 12 minutes from the loop.
Complete warehouse service with personal supervision.
Pool Car DistributionSYKES TERMINAL WAREHOUSE
929 West 19th Street Chicago, Ill.

Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

Merchandise Storage and Distributors

WAKEM & McLAUGHLIN, Inc.

Estd. 1886

MAIN OFFICE—225 E. ILLINOIS ST., CHICAGO

U. S. Internal Revenue Bonded Warehouse

U. S. Customs Bonded Warehouse

A.D.T. Service

ADVANCES MADE

Our ample financial resources enable you to negotiate
loans right in our office.

Prompt Delivery and Best of Service.

JOLIET, ILL.

WILL COUNTY WAREHOUSE COMPANY

formerly Joliet Mfg. Co., which was Established 1846
150 Youngs Ave., Joliet, Ill.Offers 50,000 Sq. Ft. of modern warehouse space, located on
the CRI and PRR Roads. Private siding and free switching.
General Merchandise storage.Automatically Sprinklered Throughout
Write for full details

PEORIA, ILL.

OUR DEPENDABILITY YOUR ASSURANCES
OF SATISFACTION.

FEDERAL WAREHOUSE CO.

800 So. Adams St.

Peoria, Ill.

Peoria is the logical Center of Distribution for Illinois.
We will be pleased to explain our service and facilities.

Member of C.I.W.A.—A.W.A.—N.F.W.A.

ROCKFORD, ILL.

BARTLETT WAREHOUSE

Modern Plant C.&N.W. Siding Free Switching

"Sparkling Service"

502-514 Cedar St.

Phones: Main 133, 134

ILLINOIS—INDIANA

ROCKFORD, ILL.

LAWSON'S TRANSFER & STORAGE

816—7th St. Rockford, Ill.



Merchandise & Household Goods
Warehouse, brick construction, sprinklered
Private siding—I.C. & C.B. & Q. R.Rs.
Consign C.L. shipments via I.C.-C.B. & Q.
L.C.L. via C.&N.W.-I.C.-C.B. & Q.-C.M. & St.P.
Member of A.W.A.—N.F.W.A.—A.V.L.



EVANSVILLE, IND.

MEAD JOHNSON TERMINAL CORP.

P. O. Box 597, EVANSVILLE 2, INDIANA

"Where Waterway . . . Railway . . . Highway Meet"

With the most modern and most unusual River-Rail-Truck Terminal and Warehouse in the United States. Sprinklered—A.D.T.

Located only ninety miles from the country's center of population. Served by six large railroads, many motor freight lines and the American Barge Line, Mississippi Valley Barge Line, Union Barge Line and independent towing operations.

Merchandise and food commodities of every description, from every part of the globe, can conveniently reach, be economically stored, and then efficiently distributed from Evansville.

Write for booklet completely describing the many unusual services available.

Member of A.W.A.

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PENN. 6-0968 1525 NEWBERRY AVE. MON.5531

FORT WAYNE, IND.

FORT WAYNE [WITH MIGHT AND MAIN] STORAGE CO. THE SAME

802-804 Hayden St., Fort Wayne 4
FIREPROOF AND NON-FIREPROOF BUILDINGS
Pittsburgh, Fort Wayne & Chicago R. R.; Grand Rapids & Indiana R. R.;
Wabash R. R.—Private Sidings—Pool Car Distribution

FORT WAYNE, IND.

Exclusively

Merchandise and Cold Storage



Modern Fireproof Warehouses—Centrally Located—P.R.R.
Siding—Lowest Insurance Rates—Pool Car Distributors—
Local Cartage Service—Branch Office Service.

MITCHELL SALES & STORAGE, INC.

435 E. Brackenridge St., Fort Wayne, Ind.
Warehouse Receipts on Staple Commodities

FORT WAYNE, IND.



AMERICAN WAREHOUSEMEN'S ASSOCIATION

PETTIT Gives You

PLUS Service in FORT WAYNE . .

- + Our own truck line plus a central location assures the best warehouse, transfer and distribution service in Fort Wayne.
- + Responsible management assures you of prompt deliveries.
- + Long experience coupled with modern and efficient equipment assures your complete satisfaction and that of your customers when you are a Pettit client.

Very low tax and insurance rates.

Let us tell you more about our service. Write today for full information on your requirements in our territory.



PETTIT'S STORAGE WAREHOUSE CO.

414 E. Columbia St., Fort Wayne 2, Indiana

New York City Representative:
MR. J. W. TERREPORTE
250 Park Avenue
Telephone: Plaza 3-1235

Chicago Representative:
MR. W. J. MARSHALL
55 W. Jackson Blvd.
Telephone: Harrison 1498

GARY, IND.

Established 1929

General Merchandise Storage and Distribution
Private Siding Indiana Harbor Belt R. R. Free Switching, Centrally
Located, Pool Car Distribution, Motor Truck Terminal, Operating our own
fleet of trucks.

GARY WAREHOUSE CO.

10th & Massachusetts St., Gary, Ind.
Phone Gary 6131

the meantime, back issues of *DandW* are becoming scarcer than hen's teeth. Paper restrictions limit our good intentions. Even though we should like to do so, it is literally impossible to comply with all requests that we receive for back numbers. We hope you will understand and make allowances.

Homesick for *DandW*

"The October issue of *DandW* has been received," writes W. L. Korzelius of the Rubber Development Corp. "We found it to be even more interesting than we anticipated. It seems that we have been more or less homesick for *DandW* without realizing it."

Storage Space

In Pittsburgh, Pennsylvania Storage Co., operated by Creasey & Co. (wholesale food) now has the use of 140,000 sq. ft. space on 17th Street, formerly occupied by White Terminal Co. White's facilities now consist of 150,000 sq. ft. at 13th St. (Leffingwell)

Elwell-Parker Celebrates Its 50th Anniversary

The Elwell-Parker Electric Co., Cleveland, O., in observing its 50th anniversary this year, points out that 1943 is also a milestone for the entire materials handling equipment industry because Elwell-Parker was the first builder of power industrial trucks for materials handling.

Organized in 1893, Elwell-Parker several years later supplied electric motors which the Pennsylvania Railroad installed on its first crude baggage-handlers at Jersey City and other terminals. Later the Cleveland company began building mobile truck equipment and after 1910 other firms entered the field. The expansion of the power truck industry to its present important place is the result of close cooperation between plant officials desirous of improving their methods of materials handling, and the truck manufacturers' own design engineers.

Although Elwell-Parker has been in

existence continuously for 50 years, its corporate history may be said to have begun with the birth in 1843 of Thomas Parker, one of the founders of the electrical industry in Great Britain. The old firm of Elwell-Parker Ltd. made motors and dynamos in Wolverhampton, England, and in 1893 licensed a separate company to build them in America.

Early in the 1900's the American Elwell-Parker interest bought out the British holdings and for more than 30 years has concentrated on the development of interior trucks for industrial use.

Soap from Peanut Oil

On the first of September, a new mill was opened by the Portales Peanut Oil Co., to process peanut oil for conversion to soap. The company is situated in Portales, N. M., and uses Spanish peanuts grown in the Portales region. Two weeks after the setting up of the mill, a tank car carrying 8,100 gal. of the oil was en route to a West Coast refinery for conversion to soap. (Gidlow)

A LETTER that has aroused considerable discussion in the Middle West and elsewhere recently is presented herewith as a matter of general interest. We have reason to believe that it expresses the opinion of many operators. It was addressed to H. C. Arnot, director, Division of Motor Transport, Office of Defense Transportation, Washington, D. C., by W. C. Burbank, agent, Ohio Household Goods Carriers Bureau, Warren, O., and is self-explanatory. Mr. Burbank's letter in part follows:

"You raise the question of misinterpretation of certain paragraphs of ODT 3, revised, by household goods carriers. The factors raised in this alleged misinterpretation go beyond ODT 3, revised. They are fourfold:

"1. ODT 3, revised. 2. Manpower. 3. Conservation of equipment. 4. Economic.

"Taking these in their order, we will refer to the questions raised in your letter. There is no question but that the carrier of household goods has become somewhat 'jittery' over the many ODT orders he has received. Fearful that some unintentional violation will deprive him of tires and gasoline he probably has become over-cautious and in some instances has leaned over backwards for fear of violation. When dealing with household goods carriers it must be borne in mind that the majority of them consist of one and two truck operators, and in many instances the owner operates a vehicle himself. He has neither

Household Goods Carriers' Agent

Explains Some Facts to the ODT

the time to familiarize himself with the orders, nor the finances to have some one do this for him, so consequently he plays safe. Now, if a shipper should call a carrier of this type and request services, and if the carrier were not absolutely certain he could render this service without a violation, it is only natural that he would mention ODT and divest himself of the responsibility for his failure to perform this service.

"Going beyond the provisions of ODT and taking up No. 2, manpower, we find a condition existing among that portion of the household goods carriers who employ drivers and helpers which makes it almost impossible to maintain any kind of service. In the beginning the Manpower Commission held local moving to be non-essential and it is so considered yet in many communities. A recent issue of the *Saturday Evening Post* carried a picture of a furniture mover and stated that he would have to seek an essential war job.

"This type of household goods carrier usually operates a warehouse in connection with his business. In fact his warehouse investment is usually the major

part of his invested capital, and it is essential to his existence as well as to the community in which he lives that this warehouse be served. This is especially true in the war centers where shipments of furniture arrive constantly with no housing facilities in which to place the furniture and must rely on the public warehouses. So this type of carrier has been compelled to spread his manpower so thin, dividing it among the warehouse, local moving, and the long distance moving that he is unable to render the service that he has been accustomed to. We do not believe that this type of carrier blames his lack of service on ODT, rather, he is inclined to blame the local Draft Boards who took his men.

"In commenting on No. 3, we find that the average carrier of household goods has been unable to obtain any new equipment since it was first frozen. There have been isolated instances where equipment has been released for the movement of household goods, but the vast majority have been told that they will have to get along with what they have.

"With depleted manpower, a carrier

HAMMOND, IND.

GREAT LAKES WAREHOUSE CORP.

General Merchandise—Storage and Distribution

Established 1922

E. C. Faure

Vice-President & Mgr.

FACILITIES—50,000 sq. ft.

Fireproof, concrete-steel-brick const.

Siding on

RR; cap. 30 cars. Located within Chicago switching district. Transit privileges.

SERVICE FEATURES—Motor term. on premises—hourly del. to Metro, Chicago and suburbs.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

(Tel.—Ham'd 3786-81)

Plummer Ave. & State Line St.

(Tel.—Chicago—ERT. 2200)

Siding on

RR; cap. 30 cars. Located within Chicago switching district. Transit privileges.

SERVICE FEATURES—Motor term. on premises—hourly del. to Metro, Chicago and suburbs.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.

Members of American Warehousemen's Association, Indiana Warehousemen's Association, Indiana Chamber of Commerce.



Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

Riley 5513

A Complete Service

General Merchandise—Cold Storage
Pool Car Distribution



Modern Motor Trucking Service
Check Out Service



All Merchandise On Check Out Cars
Placed On Platform Ready For Delivery



Consign Shipments Via N.Y.C.

Store Door Delivery and Pick-up for above RR.



STROHM WAREHOUSE AND CARTAGE COMPANY

230 WEST McCARTY ST., INDIANAPOLIS, IND.

HAMMOND, IND.

Members N.F.W.A., Allied Van Lines

JOHNSON

Transfer and Warehouse

STORAGE FOR HOUSEHOLD GOODS AND
OFFICE FURNITURE

WAREHOUSE and OFFICE: 405 Douglas Str.

INDIANAPOLIS, IND.

"Custom Service for Efficiency"

HENRY COBURN

STORAGE and WAREHOUSE CO.

Merchandise Storage, Distribution, Trucking

Licensed Space—Offices—Low Insurance

Represented by

DISTRIBUTION SERVICE, INC.

Members:
A.W.A.—Indiana W.A.

INDIANAPOLIS, IND.

"Indianapolis' Finest"

MEMBER



HOGAN

TRANSFER & STORAGE CORP.

• FURNITURE STORAGE • SHIPPING
• FIREPROOF-WAREHOUSE • PRIVATE RAIL SIDING

For Shippers' Convenience, States, Cities and Firms are Arranged Alphabetically

D and W, December, 1943—59

INDIANA—IOWA

INDIANAPOLIS, IND.

INDIANA TERMINAL & REFRIGERATING CO.

230-240 So. Penna. St. Phone Market 4361



Sprinklered Warehouses Office Rooms
General Merchandise and Cold Storage
Down Town Location with RR tracks in building.



Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

THE TRIPP WAREHOUSE COMPANY

1001 E. New York Street, Indianapolis 7, Ind.

Complete facilities for the storage and distribution of

MERCHANDISE

PRIVATE SIDING—BIG FOUR—CONNECTING WITH ALL
RAILROADS—NO SWITCHING EXPENSE. TRUCK
SERVICE.

Member A. W. A.—Ind. W. A.
Write for complete description of services
to meet your individual requirements.

Represented by
NEW YORK CHICAGO
11 WEST 43RD ST. PH. 6-0060 1525 NEWBERRY AVE. MONSIEUR

MUNCIE, IND.



HARDESTY TRUCKING

622 Broadway Telephone 4413

Local and Long Distance
MOVING—STORAGE—CRATING

Consign shipments via C&O or Big T. Distribution of
Merchandise & Household Goods. Pool Cars.

Agent for
All-Maxwell Transit Co.—National Furniture Movers

SOUTH BEND, IND.

Ullery Cold Storage & Warehouse Co.

401-403 S. Notre Dame Ave.



Merchandise and Cold Storage
Modern Cold Storage Locker Plant, 1400 Capacity
Private Siding on Grand Trunk Western Railroad
Pool Car Distribution, Trucking Service
Member A.W.A.—Ind. W.A.

TERRE HAUTE, IND.

A.D.T. Service

Distributors Terminal Corp.

Merchandise Storage and Distribution a Specialty
Pool Cars Solicited

Motor Trucks for Store Door Delivery. Our clients do the selling—We
do the rest. U.S. Licensed and Bonded Canned Foods Warehouse
License No. 12-4.

CEDAR RAPIDS, IOWA

AMERICAN TRANSFER & STORAGE CO.

SINCE 1907

General Merchandise Warehousing and Distribution. Cold
Storage.

Modern Brick Warehouse, Sprinklered 80,000 Square Feet.
Siding on C. M. St. P. & P. Rd. Free Switching from
Other Roads. Motor Freight Terminal. Agent Greyvan
Lines.



CEDAR RAPIDS, IOWA

Cedar Rapids TRANSFER & STORAGE CO.

FIREPROOF WAREHOUSE
AND TRUCK TERMINAL ON TRACKS

All Modern Facilities For Efficient Warehousing
and Distribution of Merchandise
DAILY SERVICE IN EVERY DIRECTION

DAVENPORT, IOWA

EWERT & RICHTER EXPRESS & STORAGE CO.



At Davenport, Iowa, Rock Island and Moline, Ill.
Fireproof Warehouse on trackage. Phone Dial 3-3653.
Branch office and Warehouse service—Mississippi
Valley reaching 20 Million Consumers.
Pool- and Stop-over Distribution.
Truck Terminal & Motor Truck Service.
Members: AWA NFWA IAWA.
Associated Warehouses, Inc.
Agents, ALLIED VAN LINES.



DAVENPORT, IOWA

MEMBER AMERICAN CHAIN OF WAREHOUSES



MERCHANTS TRANSFER & STORAGE CO.

ESTABLISHED 1908
Merchandise Storage, Furniture Storage &
Pool Car Distribution

MEMBERS: A.W.A.—N.F.W.A.—I.A.W.A.—
AGENTS—ALLIED VAN LINES, INC.

428
Western
Ave.



must often choose between local moving and long distance, and it is quite natural that he accept the local service in preference to chasing his equipment over the highway when has the feeling that he will be out of business when the equipment is gone. Carriers of general merchandise and other property generally operate their own garages and maintain their own equipment, but the household goods carriers in most instances are dependent on the public garage which has practically disappeared as a service institution. This adds further to the problem of the household goods carriers and intensifies his desire to conserve his equipment.

"And now we must refer to the economic problem involved. Even if there were no problem in connection with 1, 2, and 3, and even before they became a problem, there was the economic problem and that still remains today. As you well know, the movement of household goods is spasmodic and irregular, and with the exceptions of one or two densely populated districts in the country, no carrier ever maintained a regular service. It has long been the custom, however, for the carriers to book part-load shipments with the understanding

that they be warehoused until other shipments were secured to make up a profitable load at which time they would be transported to destination. No carrier, not even the largest, ever guaranteed movement with a certain time on these shipments. It was not possible before Pearl Harbor and it is not possible today to operate equipment over the highway without an adequate return of revenue. The public has always understood the conditions surrounding the movement of part-load shipments and they have been, in most cases willing to wait on these shipments for periods ranging from one to several weeks rather than have the goods packed and shipped by rail when given the choice.

"In reviewing the wording in ODT 3, Revised, 501.6 (a). It is quite clear that either reference was not made to household goods or if that was the intent then the one who drafted the order was not familiar with the movement of household goods because it provides in substance that no common carrier shall hold, carry over, store, or warehouse any shipment (of household goods) at any one station for longer than 36 hours except where there is no other common car-

rier by rail, motor, water, or otherwise capable of transporting the shipment etc.

"Shipments of household goods by rail for instance, require days of expensive preparation and then must be released at a valuation of one-third that provided by van. This applies also to motor carriers of general property. Compelling the household goods carrier to move shipment within 36 hours by van, rail or water would be, in our opinion, comparable to telling a surgeon he would have to operate within a certain specified time and if unable to do so, turn the case over to a chiropractor, chiropodist or horse doctor. There just isn't a comparison that can be made or any service available for this type of shipment other than that designed for this purpose.

"Now, we do not believe it is the intent of ODT to force a carrier to render an impossible service, although some of the district offices have attempted to do this. We believe such attempts are caused by a lack of knowledge of the operation of this industry."

DES MOINES, IOWA

BLUE LINE STORAGE CO.

200-226 - Elm - Des Moines, Ia.
Merchandise and Household Goods Storage

Private Siding — Free switch from any R.R. entering Des Moines

Members: A.W.A.—N.F.W.A.—Ia.W.A.—M.O.W.A.



DES MOINES, IOWA

Member American Chain of Warehouses

Fire Proof Warehouse

MERCHANTS
TRANSFER & STORAGE CO.

9th & Mulberry

TRY OUR SUPERIOR SERVICE

49 years' warehousing nationally known accounts gives you Guaranteed Service
Daily reports of shipments and attention to every detail.

DES MOINES, IOWA

1880—63 Years' Continuous, Efficient Service—1943

WHITE LINE TRANSFER & STORAGE CO. 120 S.W. 5th Ave.
Merchandise & Household Goods Storage
—Fireproof Warehouse—

Lowest Insurance Rate. Pool Car Distribution. Private Siding. Free Switching. Free Rail or Truck Pick-up Service.

Member of A.W.A.—May. W.A.—Ia. W.A.

Represented by ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. NEW YORK 18, N.Y. 1523 NEWBERRY AVE., MOBILE 33



DES MOINES, IOWA

Member NATIONAL FURNITURE WAREHOUSEMEN'S ASSN.
Agent ALLIED VAN LINES, Inc.

COMPLETE DISTRIBUTION SERVICES

222,000 sq. ft. of floor space in buildings of brick-concrete-steel construction. Chicago-Great Western R. R. siding with 10 car capacity. Free switching with Federal Barge Lines. Low insurance rates. Complete-Motor-Freight-Facilities. Pool car distribution—all kinds. Merchandise & Household Goods Storage, industrial and office space for rent.

Write today

DUBUQUE STORAGE & TRANSFER CO.
3000 JACKSON ST. DUBUQUE, IOWA

Member of Iowa Warehouse Ass'n.
Chicago Representative: National Warehousing Service, 519 W. Roosevelt Road. Tel. Canal 5742

MASON CITY, IOWA

A. W. A.—May. W. A.

MASON CITY WAREHOUSE CORPORATION

Merchandise Storage, Household Goods Storage, Pool Car Distribution, Local and Long Distance Moving.

Packing & Crating, Local Transfer, Private Sidings, Motor Freight Terminal.



WATERLOO, IOWA

IOWA WAREHOUSE CO.

Fireproof Warehouse Motor Truck Service

Distributing and Warehousing All Classes of Merchandise and Household Goods



KANSAS CITY, KANSAS

INTER-STATE TRANSFER AND STORAGE COMPANY

FIREPROOF WAREHOUSE
18th & MINNESOTA, KANSAS CITY, 2

Packing, Moving, Storing and Shipping. Private Siding

Agent for Allied Van Lines, Inc.

L. J. CANFIELD, Proprietor Telephone Dr. 5490



PARSONS, KANSAS

Member of A.W.A.

PARSONS COLD STORAGE COMPANY
2021 GABRIEL AVE.

COLD STORAGE AND MERCHANDISE WAREHOUSING
POOL CAR AND SPOT STOCK DISTRIBUTION
QUICK SERVICE AND REASONABLE RATES

10 car siding on MK&T—Free switching. Pick up and delivery service for 2 Motor Freight lines operating out of our terminal.

TOPEKA, KANSAS

Agent for Allied Van Lines, Inc.

TOPEKA TRANSFER and STORAGE Co., Inc.

A.W.A.

Established 1880

N.F.W.A.

FIREPROOF WAREHOUSES FOR MERCHANDISE & HOUSEHOLD GOODS
TWICE DAILY TRUCK SERVICE TOPEKA-KANSAS CITY
CITY-WIDE DELIVERY SERVICE

Private Switch Connections AT & SF, CRI & P. U.P. and M.P.

WICHITA, KANSAS

**A Modern Distribution and Warehousing Service
Brokers Office & Warehouse Co.**

149 North Rock Island Ave., Wichita 2
B. W. BILLINGSLEY, JR., Manager
Member of American Chain of Warehouses

WICHITA, KANSAS

Write or Wire



Cassell
TRANSFER & STORAGE CO.

WICHITA, KANSAS

Fireproof Storage and Sprinkler System

WICHITA, KANSAS



UNITED WAREHOUSE CO.
Merchandise Warehouses
at TWO BIG MARKETS
WICHITA, KANSAS — KANSAS CITY, MO.

LOUISVILLE, KY.

Louisville Public Warehouse Company

131 EAST MAIN ST., LOUISVILLE 2

25 WAREHOUSES

944,000 SQUARE FEET

Louisville Member

AMERICAN CHAIN—DISTRIBUTION SERVICE, INC.

Gen'l Mdse.

H. H. Goods

NEW ORLEANS, LA.

E. B. FONTAINE, Pres. & Mgr.

Commercial Terminal Warehouse Company

INCORPORATED

Modern Merchandise Warehouses

A dependable agency for the distribution of merchandise and manufactured products.

Storage Cartage Forwarding
Distributing Bean Cleaning
and Grading Fumigating

Office 402 No. Peters Street

NEW ORLEANS 16

LOUISIANA



New York—Chicago

How to Make a Bolt 'Tough'

By W. F. Schaphorst, M. E.

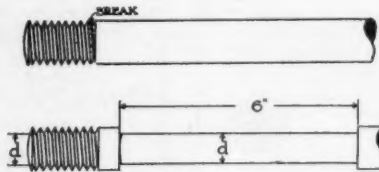
A PLANT operator was having trouble with two through bolts. They persisted in breaking at the termination of the thread about as indicated in the accompanying sketch. He took them to a repair man who made two new ones for him. But the same thing happened again shortly after, so, naturally, the plant operator felt that he had cause for complaint, and he complained.

So the shop man, who knew something about stresses and strains came to the correct conclusion that the bolts were not sufficiently elastic. The stress was obviously too high at the root of the thread—at the point where the bolts always broke. He decided that, the stress being greatest there, the stretch must also be greatest at the same point, hence, the rupture. He, therefore, placed the bolts in a lathe and turned them down to a diameter 6 in. as shown in the sketch. No more trouble thereafter was experienced by the operator of the plant.

There is nothing really new about this method as it is used in construction, in

bridges, for instance, but the writer believes it to be new as a "rebuilding" kink. It has long been known that a bolt or rod is less likely to break if its diameter is about equal to or less than the diameter at the root of the threads.

It, therefore, seems that it would be well if designers would make more fre-



quent use of this method on tension parts of machinery subject to shock. The vast majority of bolts as made today are of the easily "breakable" variety as remedied by this capable shop man.

Half-Inch Nylon Rope Lifts Three-Ton Load

A nylon rope approximately one-half inch in diameter can lift a load of three tons, E. I. duPont de Nemours & Co., Inc. recently disclosed.

Nylon rope, about twice as strong and one-half to two-thirds as heavy as manila rope of the same diameter, stretches rapidly under sudden pull, but recovers slowly, providing the elasticity desired for a perfect shock absorber.

The scientific explanation of this behavior is hysteresis, a lagging or retarding effect due to internal friction.

New Members Added By Canadian Assn.

The following firms recently became members of the Canadian Warehousemen's Assn., Joseph A. Whitmore, executive secretary, has announced:

McIntosh Cartage Co., 1120 Hamilton St., Vancouver, B. C.; Superior Cartage Co., 200 Simpson St., Fort William, Ont.; Wallace Warehouse & Cartage, 20 Botsford St., Moncton, N. B.; Arnore Cartage Co., Machar Ave., Port Arthur, Ont.

"At present, membership in the C. W. A. stands at an all time high and, with the exception of a very small number of houses, includes all representative warehouse operators in Canada," Mr. Whitmore says.

NEW ORLEANS, LA.

Represented by
Distribution
Service, Inc.
New York Chicago
San Francisco



Douglas Shipline Storage Corporation Douglas Public Service Corporation

New Orleans, La.
Sprinklered storage —
1,050,000 square feet.
Mide. and Furniture.
Switch track capacity —
100 cars.
Nine warehouses, convenient to your trade.
Loans made against negotiable receipts.
Trucking Department operating 100 trucks.
Insurance Rates 12¢ to 40¢.



NEW ORLEANS, LA.

T. E. GANNETT, Owner



Standard Warehouse Company

100 Poydras St., New Orleans 8, La.

Complete Warehousing Service

SHREVEPORT, LA.

The Distribution Center of
of ARK.—LA.—TEX.

SPECIALIZING IN

MERCHANDISE STORAGE AND POOL CAR DISTRIBUTION

Modern fireproof facilities with sprinkler system . . . Private siding . . . Watchman service . . . Low insurance rate . . . Truck connections with all motor freight lines . . . Courteous, efficient service for thirty-two years . . . IF you want your customers to get the best in Distribution Services HAVE HERRIN HANDLE!!!

HERRIN TRANSFER AND WAREHOUSE CO., INC.
MARSHALL AT DAVIS STREET, SHREVEPORT, LA.
Household Goods Storage and Transfer. Trucking Delivery Service.



NEW ORLEANS, LA.

Member of A.W.A.

Independent Warehouse Co., Inc.

2800 CHARTRES STREET
Specializing in MIDE Distribution
— Operating Under Federal License —

All concrete Warehouses, sprinklered, low insurance rates, Low handling costs. Located on Mississippi River—shipside connection. Switching connections with all rail lines. State Bonded. Inquiries Solicited.



NEW ORLEANS, LA.

New Orleans Merchandise Warehousemen's Ass'n.

MALONEY TRUCKING & STORAGE, Inc.

133 NORTH FRONT ST.

An able servant to the PORT OF NEW ORLEANS
Complete warehousing facilities—Distribution—Weighing—Forwarding—Fumigating—Storage—Cartage—Field Warehousing—Office Space—Display Rooms—Sprinklered Risk.

UNITED STATES AND STATE BONDED

Represented by
ALLIED DISTRIBUTION INC.
NEW YORK CHICAGO
1205 NEWBURY AVE. MOBILE



BANGOR, MAINE

McLAUGHLIN WAREHOUSE CO.

Established 1875

Incorporated 1918

General Storage and Distributing

Rail and Water Connection—Private Siding

Member of A.C.W.—A.W.A.—N.F.W.A.—Agent A.V.L.

BALTIMORE, MD.

For Details See Directory Issue

BALTIMORE FIDELITY WAREHOUSE CO.

Hillen & High Sts., Baltimore 2

T. E. WITTERS, President

Baltimore's Most Modern Merchandise Warehouses
Rail and Water Facilities
Pool Car Distribution—Storage—Forwarding
Private Siding Western Maryland Railway



BALTIMORE, MD.

Incorporated 1905



Baltimore Storage Co., Inc.
N. W. Cor. Charles and 26th Sts.
MODERN FIREPROOF WAREHOUSE. EVERY FACILITY
FOR THE HANDLING OF YOUR SHIPMENTS.
Exclusive Agents for
AERO MAYFLOWER TRANSIT CO.
Vans Coast to Coast Canada and Mexico

BALTIMORE, MD.

CAMDEN WAREHOUSES

Operating Terminal Warehouses on Tracks of
The Baltimore & Ohio Railroad Co.
A.D.T. Private Watchman, Sprinkler
Storage—Distribution—Forwarding
Tobacco Inspection and Export—Low Insurance Rates
Consign Via Baltimore & Ohio Railroad

BALTIMORE, MD.

Main Office: 6200 Blk. Philadelphia Rd.

U. S. Customs
Bonded Draymen

DAVIDSON

TRANSFER & STORAGE CO.

Household Goods and Merchandise—Storage—Delivery
—Unloading—Special Flat Bed Trucks for Lift Cases.
Agents: Allied Van Lines . . . Member N. F. W. A.

BALTIMORE, MD.

Morris J. Reilly, Pres. A. Bernard Heine, Vice-Pres.

FIDELITY

STORAGE CO.

2104-6-8 MARYLAND AVE.
Baltimore's Modern Fireproof Warehouse
Your Clients Efficiently Served. All Collections Promptly Remitted
MOTOR FREIGHT SERVICE
Household Goods Pool Car Distribution Merchandise
Member of N.F.W.A.—M.F.W.A.—M.M.T.A.
Agents for Allied Van Lines, Inc.

BALTIMORE, MD.

Norman Geipe

VAN LINES

& FIRE-PROOF
STORAGE WAREHOUSES
524 to 534 WEST LAFAYETTE AVENUE
The Most Complete Moving and Storage Organization in Baltimore.
Long Distance Moving to 34 States—Certificate granted—MC-52452.
Tariff-Independent Movers' and Warehousemen's Assoc.

BALTIMORE, MD.

HAMPODEN TRANSFER & STORAGE CO.
3630 FALLS ROAD • BALTIMORE

NORTH AMERICAN

VAN LINES, INC.

Long Distance Moving

BALTIMORE, MD.

SECURITY STORAGE CO.

15 W. NORTH AVE.

EFFICIENT WAREHOUSEMEN
MOTOR VAN SERVICE
RESPONSIBLE AND COURTEOUS MANAGEMENT

BALTIMORE, MD.

Founded 1893



TERMINAL WAREHOUSE CO.

Davis & Pleasant Sts., Baltimore 2
Operating four Modern Warehouses on tracks
of Pennsylvania Railroad Company.
Resources \$750,000
Trucking Storage
A.D.T. Watchmen
Pool Car Distribution
Financing Bonded Spaces
Represented by
Associated Warehousemen, Inc., New York and Chicago

Postwar Disposition of War Materials Should Be Planned Now, Ruhf Urges

Orderly, rationed disposition of war materials in the postwar period was urged recently in a statement made by C. T. Ruhf, president, Mack Mfg. Corp. The truck executive points out that Swift production changeover at the cessation of military orders is already a headache for a limited number of plants, and will increase proportionately with Allied military success. But the final disposition of surpluses accruing from the war remains a far greater nightmare that must be faced now, Mr. Ruhf believes.

Planned disposition requires serious thought, he says, lest we slip into the errors that were an outgrowth of the sudden halt of hostilities in World War I. The relief was so great, he says, that war material was dumped haphazardly throughout Europe and the United States. This action, he points out, made itself felt immediately in reduced postwar sales and consequently curbed factory employment.

"This time," Mr. Ruhf declares, "articles that have a peacetime value, such as motor vehicles, clothing and food, should be disposed of according to a plan formed now, before the end of the war.

Much of the material will be needed by reorganized governments to rebuild their economic future. This equipment and food could be given to them on a long-term lend-lease basis, or if realism prevails, it could be left as an outright gift for use by the country's army or navy, a goodwill offering from Uncle Sam. However, there must be a string attached, prohibiting its resale.

"Provision should be made that the equipment remain in the country to which it is given. This would avoid repetition of some of the errors that marred disposition of materials following the first World War. A case in point was the dumping of U. S. manufactured motor vehicles abroad for a few cents on the dollar valuation. Since no provision had been made to keep the vehicles in Europe, buyers from this country flocked across and repurchased the equipment at a cost that allowed profitable U. S. resale despite shipping charges.

"Similarly clothing, shoes and motor vehicles were dumped indiscriminately in this country. This hasty action, as much as anything, helped throw U. S. economy off balance immediately following the war."

Mr. Ruhf's statement asks that plans be started now to absorb the economic shock that is bound to follow the war. He asked for an indication of the trend of governmental thinking on this matter to encourage private enterprise in post-war planning.

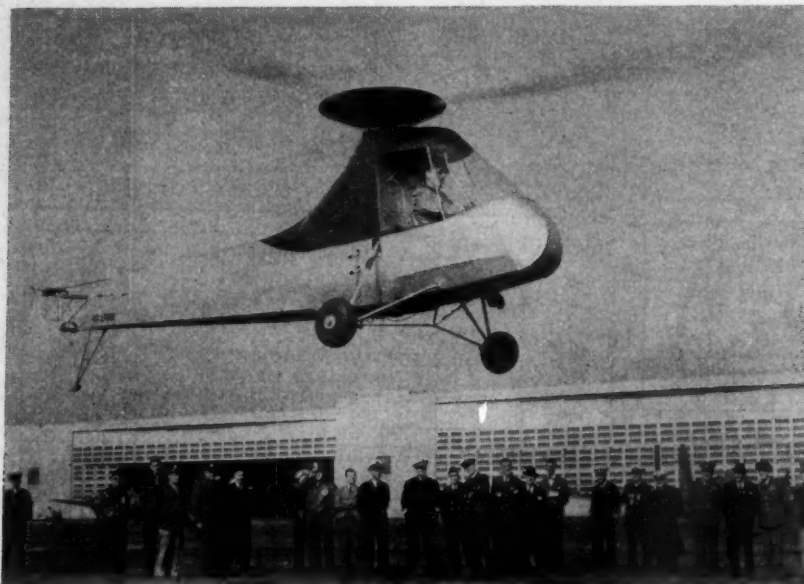
Post-War Survey Of New York Port

The Port of New York Authority has embarked upon a comprehensive economic and engineering survey of the current and postwar trade and transaction position of the New York-New Jersey area. A planning division has been set up in the department of port development to make an over-all appraisal of the effect of war-induced changes upon the port region and to formulate a long-range program for maintaining the port of New York as the crossroads of air, rail, ship and truck transports. These planning activities will be paralleled by economic and engineering studies of terminal projects, to serve carriers, shippers, and the traveling public, for construction as soon as the manpower and material situation permits. At the same time, the authority is developing an intensive plan of port promotion to be carried forward in co-operation with the business interests of the area.

POST-WAR SALES BUGGY . . . Many sales executives believe that the helicopter will play an increasingly important part as a means of transportation for salesmen after the war. The helicopter shown above is reputed to be one of the most promising examples of this type of aircraft. Styled by Harry S. Pack, chief, Air Cargo Technical Development, Pennsylvania-Central Airlines, it is being demonstrated by

Frank N. Piasecki, president, P-V Engineering Forum, Inc., at the Washington National Airport.

The three-blade rotor has a 25-ft. diameter and the machine has a gross weight of 1,000 lb. including the pilot and two hours' fuel. It can develop 95 m.p.h. forward speed and can be set down in a clearing of 50 ft. diameter.



15,983 New Freight Cars Authorized by ODT

The Office of Defense Transportation announced recently that the War Production Board has scheduled for production 15,983 additional new freight cars, of which 10,122 are for delivery during the first quarter of 1944; 4,456 during the second quarter and 1,405 during the third quarter.

Under the Controlled Materials Plan, the War Production Board allotted tonnage of steel and other materials for the fourth quarter of 1943 for the construction of the 10,122 new cars. However, due to the time lag in getting the allocated materials flowing into the car builders' shops, these cars will be produced during the first quarter of 1944.

New Traffic Club Formed in Toledo

New type of transportation club is being organized in Toledo, Ohio, composed of employees of transportation and shipping departments in Toledo firms who wish to learn more about the problems of transportation. Group, to be known as the "Tariff Club of Toledo," will invite transportation heads of various Toledo industries to appear before it for trade talks. Clarence E. Rowley, transportation commissioner of the Toledo Chamber of Commerce, aided in the formation of the group. (Kline)

BOSTON, MASS.

CLARK-REID CO., INC.
GEO. E. MARTIN, President
GREATER BOSTON SERVICE
HOUSEHOLD GOODS STORAGE—PACKING—SHIPPING
OFFICES: 81 Charles St., Boston
180 Green St., Cambridge
Mass. FWA Conn. WANIWA AVL

BOSTON, MASS.

CONGRESS STORES, Inc.
38 STILLINGS ST.
GENERAL MERCHANDISE STORAGE
Central Location—Personal Service
Pool Car Distribution
Sidings on N. Y., N. H. & H. R. R.
Patented By A.D.T. Service
Member Mass. Warehousemen Assn.

BOSTON, MASS.

Established 1896
PACKING MOVING
D.W. **DUNN** CO.
STORING SHIPPING
Member May W. A. 1175 Washington St.

BOSTON, MASS.

FITZ WAREHOUSE CORPORATION
operating
ALBANY TERMINAL STORES
137 Kneeland Street, Boston
GENERAL MERCHANDISE STORAGE
B. & A. R.R. Delivery
Represented by
NEW YORK: BLISS DISTRIBUTION INC. CHICAGO:
20 WEST 42ND ST. PHIL. 6-0906 1525 NEWBERRY AVE. MON. 5531

BOSTON, MASS.

Hoosac Storage and Warehouse Company
Lechmere Square, East Cambridge, Mass.
FREE AND BONDED STORAGE
A.D.T. Automatic Fire Alarm
Direct Track Connection B. & M. R. R.
Lechmere Warehouse, East Cambridge, Mass.
Hoosac Stores, Hoosac Docks, Charlestown, Mass.
Warren Bridge Warehouse, Charlestown, Mass.

BOSTON, MASS.

W. A. KELSO A. WALTER LARKIN
Pres. Treas. & Mgr.
C. F. COWLEY, Asst. Treas.
J. L. KELSO COMPANY
Established 1894
General Merchandise Warehouses
UNION WHARF, BOSTON
Connecting all railroads via A.D.T. Service
Union Freight Railroad Co. Motor Truck Service
Member of Mass. W. A.

BOSTON, MASS.

Phone: CAP. 7760
MERCHANTS WAREHOUSE CO.
453 COMMERCIAL STREET, BOSTON 13
Central Location. Private railroad siding, connected to all railroads.
Free and Bonded Storage.
A. W. A. M. W. A.
One of THE CHAIN OF TIDEWATER TERMINALS and Inland Warehouses

BOSTON, MASS.

QUINCY MARKET COLD STORAGE AND WAREHOUSE COMPANY
Incorporated 1881
178 Atlantic Ave., Boston 10, Mass.

MASSACHUSETTS—MICHIGAN

BOSTON, MASS.

WIGGIN TERMINALS, Inc.

50 Terminal St. Boston (29) Mass.
STORAGE

B. & M. R. R. N. Y., N. H. & H. R. R.
Mystic Wharf, E. Street Stores
Boston South Boston

BOSTON, MASS.

ESTABLISHED 1830

D. S. WOODBERRY CO.

P. O. BOX 122, NORTH POSTAL STATION, BOSTON
Largest Pool Car Distribution Specialists for New England
TRUCKING & STORAGE

BOSTON & MAINE R. R. SIDING

FALL RIVER, MASS.

REMY MOVING COMPANY
310 THIRD STREET • FALL RIVER



**NORTH AMERICAN
VAN LINES, INC.**
Long Distance Moving

SPRINGFIELD, MASS.

F. G. Monney, Pres. J. G. Hyland, V-Pres.

**HARTFORD DESPATCH
and WAREHOUSE CO., Inc.**

214 BIRNIE AVENUE, SPRINGFIELD, MASS.
U. S. Bonded Warehouses Pool Car Distribution Household and
Merchandise facilities Private Siding Our fleet covers Connecticut
and Massachusetts daily. Warehouse at Bridgeport and Hartford, Conn.
Members: NFWA—AWA—ACW—AVL Agents

SPRINGFIELD, MASS.

MEMBER



J.J. Sullivan The Mover, Inc.

Fireproof Storage

Offices: 385 LIBERTY ST., SPRINGFIELD 1

HOUSEHOLD GOODS STORAGE, Packing,
Shipping, Pool Car Distribution of All Kinds
Fleet of Motor Trucks

BATTLE CREEK, MICH.

EDGETT & HALL TRANSFER CO.
220 McCAMLY ST. • BATTLE CREEK



**NORTH AMERICAN
VAN LINES, INC.**
Long Distance Moving

LYNN, MASS.

LYNN STORAGE WAREHOUSE CO.
154-156 Pleasant St.

The only Fireproof warehouses on the North Shore complete
with every facility and private sidings for the storage and
distribution of merchandise, automobiles and household
goods. 100,000 sq. feet of space.

Distributors—Packers—Shippers—Movers
Member N.F.W.A.—Mass. F.W.A.



NEW BEDFORD, MASS.

NEW BEDFORD STORAGE WAREHOUSE CO.

MAIN OFFICE — 152 FRONT STREET

Large modern warehouses centrally located in wholesale
district—specially constructed for storage, handling and
distribution of general merchandise.

Storage and Industrial Space for Rent or Lease
Furniture, Storage, Packing and Shipping
Member of AWA—NFWA—AVL—American Chain of Wholes.



WITTSFIELD, MASS.

T. ROBERTS & SONS, INC.

Local and Long Distance Furniture Moving

Fireproof Storage Warehouses
Household Goods Storage — Packing — Shipping
Merchandise Storage and Distribution
Pool Car Distribution

DIRECT R.R. SIDING B. & A. R.R. OR ANY R.R.

SPRINGFIELD, MASS.

ANDERSON & BENSON CORP.
270 LIBERTY ST. • SPRINGFIELD



**NORTH AMERICAN
VAN LINES, INC.**
Long Distance Moving

SPRINGFIELD, MASS.

**ATLANTIC STATES WAREHOUSE AND
COLD STORAGE CORPORATION**
385 LIBERTY ST.

General Merchandise and Household Goods Storage. Cold Storage for
Butter, Eggs, Poultry, Cheese, Meats and Citrus Fruits
B. & A. Sidings and N. Y., N. H. & H. R. R. and B. & M. R. R.
Daily Trucking Service to suburbs and towns within a radius of fifty
miles.
Member of A.W.A.—M.W.A.

DETROIT, MICH.

ANNOUNCING

DETROIT TERMINAL WAREHOUSES, INC.

W. A. SELLON, GEN. MGR.

4444 LAWTON AVE.

PH: TY 7-5334

DETROIT, MICH.



Central Detroit Warehouse

Located in the heart of the wholesale and jobbing
district, within a half-mile of all freight terminals.
Modern buildings, lowest insurance rate in city.

Warehouse & Terminals Corporation

Wyoming and Brandt Avenues

Modern concrete buildings, fully sprinklered,
serving the west side of Detroit and the city of
Dearborn. Specializing in heavy and light package
merchandise and liquid commodities in bulk. Con-
nected directly with every railroad entering the city.

Central Detroit Warehouse Co.

Fort and Tenth Streets, Detroit, Mich.

MICHIGAN

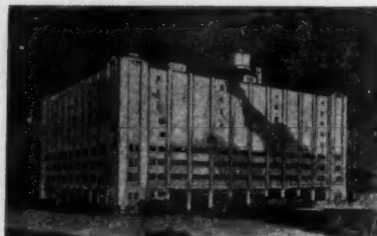


Member **AMERICAN WAREHOUSEMEN'S ASSOCIATION**

GRAND TRUNK WAREHOUSE & COLD STORAGE COMPANY

DETROIT, MICH.

Ferry Ave., E. and Grand Trunk Railway



Local, regional and storage-in-transit service, offering every facility known to modern distribution.

New	Trunk Line
Ultra-Modern	Terminal
Plant	Complete Service
Continent-wide Connections	

DETROIT, MICH.

DETROIT STORAGE CO.

Established 54 Years

STORAGE WAREHOUSES ALL OVER DETROIT

Local and Long Distance Removals
Foreign and Domestic Shipping

Main Office

2937 East Grand Boulevard

Telephone Trinity 2-8222



DETROIT, MICH.

Henry & Schram Storage & Trucking Company

"The Warehouse of Service"
MERCHANDISE STORAGE—GENERAL TRUCKING
CAR LOAD DISTRIBUTION



Private Siding on
Wabash—Canadian Pacific—Pennsylvania—Pere Marquette Railways

A.D.T. Aero Automatic Fire Alarm and
A.D.T. Burglary and Fire Protection
"Your Interests Are Always Ours"

1941-63 W. Fort Street
DETROIT 16, MICHIGAN

Why the South Is Entitled to Lower Freight Rates

(Continued from page 12)

not the South gradually turned to industry and the manufacture of high grade articles. Among other industries, a great iron and steel industry grew up in Alabama; large cotton factories were opened in the Carolinas and Georgia; and a tremendous tobacco manufacturing business grew up in North Carolina. The hampering effects of high and inequitable freight rates became more noticeable and irritating with each passing day, and the South's leaders soon plunged into a fight to achieve more equitable and favorable rates. This fight has been going on approximately 70 years.

That the basing point system produces unjust and discriminatory rates was recognized by the Interstate Commerce Commission back in 1925 in its decision in the Southern Class Rate case. At the time the Commission partially did way with the system, and in doing so it laid the foundation for the present investigation. Clear proof that the system is outmoded, if any be needed, may be found in the large number of "commodity rates"—these are rates on goods which, because of the needs of commerce, have been removed from the class rate classification and now move on special rates.

South Seeks Parity

Through its brief, the South seeks parity of class rates with official territory, and asks for the uniform application of class rates and classification ratings throughout the territory east of the Mississippi. It suggests that the present Appendix E first-class scale—the basic scale in official territory—prescribed by the commission in the Eastern Class Rate Investigation for application in connection with the Official Classification, constitutes the best available measure of reasonable rates and ratings. However, the South is willing to leave the method of adjusting the freight rates to the judgment of the commission.

Though it takes cognizance of the freight rate situation now existing west of the Mississippi and states that it is entirely willing for that territory to have the same level of class rates applicable to the territory east of the Mississippi, the brief is wholly concerned with presenting the oft-made contentions of the South.

Chief among its arguments is the contention that the present freight rate structure discriminates against the South

and retards its industrial development.

38% Higher

Generally speaking, the basic scale of rates within the South and from the South to the North are 38 per cent higher than the basic scale of rates within and from Official or Northern territory. And in some instances they are even higher. When related mathematically—Official Territory 100 per cent and Southern territory, 138 per cent—some of the rates on important classes of traffic vary from 70 per cent to 175 per cent within the South, and from 90 per cent to 209 per cent interterritorially. As an example, the brief cites the cost of shipping granite for curbing or paving from Elberton, Ga. If granite is shipped at first class rates from Elberton, Ga., to a destination in the Central Freight Association territory, it costs approximately 150 per cent more than granite shipped an equal distance from Barre, Vt., to the same destination. Thus, the Elberton producer pays relatively higher rates than his New England competitor.

Again, the brief states that in Cotton Woolen and Knitting Factory Products 211 ICC 692,708, the ICC pointed out that "on interterritorial hauls between Southern and Official territories, when two-thirds of the haul is in Southern territory and one-third in Official, the first class rates for the various distances range from two cents under to six cents over the Southern K-2 Scale for the through

distance." Thus, even though one-third of the haul is in so-called lower-rated territory, little or no credit is given for that haul.

Other Examples

Other examples of a discriminatory nature are the rates on flavoring syrup and paper school blank forms, both of which are manufactured in Atlanta. Syrup is distributed in less than carload quantities, and the general rate level from South to the North is 40 per cent higher, distance considered, than applies on this commodity within the North. School blank forms are distributed in carloads, except in Southern territory. The rate level from South to North on this commodity, per carload, is 75 per cent higher than applies in the North, whereas the approximate difference in the first class rate level is 38 per cent.

And these are but a few of the many examples of unjust discrimination cited in the brief.

That such discrimination is restrictive of the full economic development of the

South and that the concentration and specialization now existing in Official territory, as contrasted with that in the South, is not conducive to the full and healthful development of the country as a whole, is clearly set forth in the brief by a series of statistics.

Statistics Cited

These statistics show that in 1940 the per capita dollar income in the United States averaged \$579, and the average dollar income per person employed totaled \$1,688. A further breakdown of these figures shows the per capita income in Official territory averaged \$701, as compared to the South's per capita income of \$313. The same disparity also exists between the income per person of individuals employed in the North, and those employed in the South—in the North, \$1,988; in the South, \$940.

Points in Brief

Supporting its contention that the concentration and specialization now existing in Official territory is not conducive

to the full and healthful development of the country as a whole, the brief sets forth these facts:

"Official territory terminated more tonnage than it originated, but in contrast, it originates greater tonnage of manufactures and miscellaneous freight than it terminates.

"Official territory had, in 1940, an inbound net traffic balance value of all commodities of \$724,627,000, and an outbound value of manufactured goods amounting to \$1,555,264,000.

"Official territory ships goods into the South, Southwest, and Western trunk-line territories only after intensively enhancing their values, whereas the goods these territories ship to Official territory fall far short of that point.

"Official territory does not have a monopoly of material and energy resources. It has only two per cent of the zinc; only seven per cent of the raw timber; only 25 per cent of the coal; and only three per cent of the petroleum reserves.

"There is an abnormal concentration of national markets in Official territory.

DETROIT, MICH.

John F. Ivory Stge. Co., Inc.

MOVING—PACKING—SHIPPING
STORAGE—PRIVATE SIDING

8035 Woodward Ave., Detroit, Mich.

DETROIT, MICH.

Facing the Busiest
Thoroughfare in

DETROIT

In this modern fireproof building you can have bright, inexpensive, specially designed offices under the same roof with a complete warehouse and distribution service.

150,000 sq. ft. located on Detroit's busiest thoroughfare. Private siding facilities for 10 cars with free switching from all railroads. Large, enclosed loading dock. Our own trucks make prompt reshipment and city deliveries.

JEFFERSON TERMINAL WAREHOUSE

1900 E. Jefferson Ave.

DETROIT 7, MICHIGAN

DETROIT, MICH.

MACK AVENUE STORAGE & MOVING
3454 MACK AVE. • DETROIT 7

NORTH AMERICAN VAN LINES, INC.
Long Distance Moving

DETROIT, MICH.

Established 1882

RIVERSIDE STORAGE & CARTAGE CO.

Cass & Congress Sts., Detroit, Mich.
Household Goods and Merchandise Storage
Moving—Packing—Shipping
Personal Service Guaranteed
Members — A.W.A. — N.F.W.A. — Allied Van Lines

DETROIT, MICH.

AN ASSOCIATED

Member A.W.A.

In
Greater
DETROIT
THE BEST IS
★ U.S. ★
UNITED STATES WAREHOUSE COMPANY
1448 WABASH AVENUE PHONE RANDOLPH 4730
DIVISION OF
UNITED STATES COLD STORAGE CORPORATION
OPERATING
United States Cold Storage Corporation Chicago
United States Cold Storage Company Kansas City
United States Cold Storage Company Dallas
United States Warehouse Company Detroit



DETROIT, MICH.

Members N. F. W. A.

Wolverine Storage Company, Inc.

11850 E. Jefferson Ave., Detroit 14
STORAGE AND MOVING, PACKING
AND SHIPPING

Agent for Allied Van Lines, Inc.

MICHIGAN—MINNESOTA

LANSING, MICH.

FIREPROOF STORAGE CO.
 Established 1919
 430-440 No. Larch St., Lansing, Mich.
 Merchandise and Household Goods Storage
 —Modern Fireproof Building—
 Pool Car Distribution—Private Siding
 P.M.R.R.
 Trucks for Local Deliveries
 Member of A.W.A.—May W.A.

LANSING, MICH.

Agent for Allied Van Lines, Inc.
LANSING STORAGE COMPANY
 The only modern fireproof warehouse in Lansing exclusively for household storage.
MOTHPROOF FUR AND RUG VAULTS
 Local and Long Distance Moving
 "WE KNOW HOW"
 440 No. Washington Ave.

Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

BRANCH HOUSE SERVICE ... AT WAREHOUSE COST

- It is possible here to secure the same high-grade service you would expect in your own branch warehouse, but at less expense and without worry or trouble.
- Saginaw is a distribution point for Northeastern Michigan. Every merchandise warehouse facility is available at Central-Warehouse Co.
- Merchandise storage, cartage, pool car distribution, daily direct service to all points within 75 miles by responsible carriers.

CENTRAL WAREHOUSE CO.
 1840 No. Michigan Avenue SAGINAW, MICHIGAN

MINNEAPOLIS, MINN.

Kedney WAREHOUSE CO.
 617 WASHINGTON AVE., NO.
 Minneapolis 1
STORAGE
MERCHANDISE & HOUSEHOLD GOODS
 A.W.A.—N.F.W.A.—Minn. N.W.A.

MINNEAPOLIS, MINN.

George La Belle, Pres.
LA BELLE SAFETY STORAGE & MOVING CO.
 708 Central Ave. Minneapolis, Minn.
 OPERATING AGENTS ALLIED VAN LINES
 Fireproof Storage Warehouses.
 Large fleet of equipment for local and long distance moving.

MINNEAPOLIS, MINN.

Member of
MINNEAPOLIS TERMINAL WAREHOUSE CO.
 STORAGE — TRUCKING — POOL CAR DISTRIBUTION
 Complete Facilities At The Three Important Centers
 Minneapolis Midway St. Paul

MINNEAPOLIS, MINN.

BEN KOCH, PRES. GEO. KEENE, T. M.
 Packing and forwarding
 Local and Long Distance Moving House-hold Goods Storage a Specialty.
Minneapolis
Van & Warehouse Co.
 106 FIRST AVENUE NORTH, MINNEAPOLIS

Fifty-three per cent of the total market for the necessities of existence is in Official territory (because it has one-half the population with only 16 per cent of the land area). Because of its higher individual income, it absorbs 62 per cent of consumer luxuries. Because it has more than three-fourths of the manufacturing activity of the country, Official territory has a concentrated market for raw materials and industrial machinery and equipment of all kinds.

"The standard of living is very much higher in Official territory than in the South.

"The South and West are much more dependent upon agricultural commodities and other raw materials than is Official territory, and there is a clear downward slope of income as dependence on raw materials increases."

But, the brief argues, there is not justification for the average individual of the South to be so poor. The South's resources, climate and population entitle it to a greater share in industry and income. That the South possesses a great wealth of natural resources is, of course, well-known. Its soil is rich and of great diversity, growing a wide variety of products; it contains more than a third of the nation's first class farming land. It possesses 40 per cent of the nation's forests. It has more than 300 different minerals and contains more than a fifth of the nation's coal, and mines more than a tenth of the nation's iron ore annually.

The South produces two-thirds of the nation's crude oil; it furnishes one-half of the nation's marble; Texas and Louisiana produce 99 per cent of the nation's sulphur; and Florida and Tennessee produce 97 per cent of the nation's phosphates. North Carolina produces 70 per cent of all the mica mined in the United States. It is a paradox that, while blessed by Nature with immense wealth, the South as a whole, is the poorest section of the country.

Must Receive Freight Six Days a Week

All wholesale and retail establishments, and public warehouses and terminals in San Francisco and the Eastbay area, must operate and receive freight on a full six-day-a-week schedule "to avoid unnecessary transportation congestion." The request was issued by the Office of Defense Transportation. Formerly, following complaints of week-end congestion, warehouse operators and other receivers of freight in this area agreed to have skeleton staffs on hand to receive freight on week-ends. This arrangement did not prove adequate.

In requesting full six-day-a-week receipt of freight in this increasingly busy port, J. Roy Willhide, district manager of ODT's Division of Motor Transport, said ICC joined with ODT in the appeal, and asked that freight be accepted even if certain establishments were not open

to the public during a full six-day week. Because of high wages paid to warehousemen, and the time-and-one-half and double time clauses, operators have been reluctant to take on the overtime operations in some cases. (Gidlow)

Army Air Transport Helps Harvest Potatoes

The Army Air Transport helped expedite hauling of the 90,000 ton potato crop of the delta district of California's San Joaquin Valley by providing a motored barge by means of which approximately 80,000 sacks of potatoes, which could not otherwise have been moved, were transported to San Francisco.

In previous years a considerable portion of the delta area potato crop in the Stockton district had been carried by barges because trucks could not be used advantageously in certain areas because of the boggy ground.

When the crisis in potato movement arose recently, the Coastwise and Inter-coastal Transport Division of ODT learned that the S. S. Dorothea, a motored barge undergoing repairs for use by the Army Air Transport Depot at Stockton, was the only additional vessel which could be diverted for crop hauling. The depot's commanding officer thereupon ordered repairs to the barge speeded up and the vessel was turned over for potato hauling for the duration of the harvest season. (Herr)

MINNEAPOLIS, MINN.

CENTRAL and COMPLETE FACILITIES

Merchandise warehouse completely sprinklered—State Bonded. Pool cars distributed. Close to metropolitan Minneapolis and St. Paul, Northwestern Terminal places at your disposal 20 trucks, 15 tractors and 50 semi-trailers—complete motor equipment.

NORTHWESTERN TERMINAL CO.
600 Stinson Blvd. Minneapolis
Member: MINNEAPOLIS N. W. A.

ROCHESTER, MINN.

Merchandise and Household Goods Storage
Local Pool Car Distribution
Packing—Crating—Bonded Storage
Local and Long Distance Moving

ROCHESTER TRANSFER & STORAGE CO.
10—1st Ave., S. E., 'Phone 4515
Rochester, Minn.

Member N.F.W.A. and Allied Van Lines, Minn. Northwest W.A.

ST. CLOUD, MINN.

STATE BONDED



LANDWEHR TRANSFER LINE

202 6th AVENUE NORTH

Household Goods, Merchandise Storage and Transfer. Motor Freight Terminal. Printed Tariff Schedule. Merchandise Pool Cars distributed. Ship C.L. via G.N. or N.P.
Member: Minn. Northwest W.A.

ST. PAUL, MINN.

BELTMAN COMPANY
1085 GRAND AVE. • ST. PAUL



NORTH AMERICAN VAN LINES, INC.
Long Distance Moving

AMERICAN WAREHOUSEMEN'S ASSOCIATION

A COMPLETE WAREHOUSING SERVICE
Merchandise Storage — Cold Storage
Pool Car Distribution
Industrial Facilities

Situated in the Midway, the center of the Twin City Metropolitan area, the logical warehouse from which the Twin Cities and the Great Northwest can be served from one stock, with utmost speed and economy. No telephone toll charge to either city.

CENTRAL WAREHOUSE COMPANY
739 Pillsbury Avenue St. Paul 4, Minnesota

Phone: Nestor 2831
Represented by DISTRIBUTION SERVICE, INC.
210 E. N. Water St. CHICAGO
Phone: Superior 7180
2 Broadway NEW YORK CITY
Phone: Bowling Green 9-0986
825 Third St. SAN FRANCISCO
Phone: Sutter 3461

ST. PAUL, MINN.

Agents for Allied Van Lines, Inc.
Member of N.F.W.A.—A.W.A.



Special attention given household effects of your officials and employees moved from or to St. Paul.

HOUSEHOLD GOODS STORAGE MERCHANDISE STORAGE
Complete Branch House Service

FIDELITY STORAGE and TRANSFER CO.
Office & Warehouse: 332 Rosabel Cor. E. 4th St. Paul, Minn.

ST. PAUL, MINN.

Kedney

WAREHOUSE CO.
8th and John Sts.

STORAGE
MERCHANDISE & HOUSEHOLD GOODS

A.W.A.—N.F.W.A.—Minn. N.W.A.

JOPLIN, MO.

SUNFLOWER LINES, INC.

Successors to Tennesse Transfer & Storage Co.

1027-41 Virginia Ave. Joplin, Mo.

Distribution and storage of merchandise
Fireproof warehouses—Motor van service
On railroad siding—Lowest insurance rates



PACKING—STORAGE—SHIPPING
Agent for Greyvan Lines, Inc.



KANSAS CITY, MO.

In Kansas City

it's the A-B-C FIREPROOF WAREHOUSE CO.

Distribution Cars are so handled as to carefully safeguard your own interests and those of your customers.

Three Fireproof Constructed Warehouses

Member of N.F.W.A. Agents, Allied Van Lines, Inc.



KANSAS CITY, MO.

Merchandise Storage - Low Insurance Rates - Pool Car Distribution - Freight Forwarders and Distributors via rail or daily motor service to entire Southwest.

MEMBER OF American Warehousemen's Association • American Chain of Warehouses • Traffic Club • Chamber of Commerce

ADAMS TRANSFER & STORAGE CO.
"Surrounded by the Wholesale District"
UNION TRUCK TERMINALS
228-236 West Fourth St. Kansas City 6

KANSAS CITY, MO.

Established 1880

CENTRAL STORAGE CO.

Efficient, Complete Merchandise Warehousing Service

Office—1422 ST. LOUIS AVE.
(West 10th Street)

In Center of Wholesale and Freight House District

KANSAS CITY, MO.

Financing

CROOKS TERMINAL WAREHOUSES

"Kansas City's Finest Warehouses"

A.D.T. BURGLAR ALARM

LOWEST INSURANCE RATES

COOL ROOM FACILITIES

BEST RAILROAD FACILITIES

IN THE HEART OF THE FREIGHT HOUSE AND WHOLESALE DISTRICT

Operating Brokers' Warehouse, Security Warehouse, Terminal Warehouse



KANSAS CITY, MO.

STORAGE AND DISTRIBUTION



300,000 sq. ft.
Trackage on three railroads
Truck docks—
Low Insurance

Merchandise Warehouses, Inc. ST. LOUIS AVE. & MULBERRY ST.

KANSAS CITY, MO.

Mid-West Terminal Warehouse Co.
2020-24 Walnut St.

"Right in the midst of Business"

Complete Warehouse Service—Pool Car Distribution—We invite your inquiries.

Owned and operated by the

St. Louis Terminal Warehouse Co., St. Louis
See our ad.



KANSAS CITY, MO.

Established 1903

POOL CAR TERMINAL—Spacious, enclosed, sheltered loading Dock, facing wide Street in Wholesale and Shipping District on B&O-Alton Railroad siding.

MERCHANDISE STORAGE — GENERAL CARTAGE

Sprinklered—A.D.T.—Fleet modern Equipment

THE ONLY WAY TRANSFER & WAREHOUSE CO.

1400-10 St. Louis Avenue

Winter Driving Hazards

(Continued from page 15)

and avoid rubbing curbs. Chain conservation is essential.

Lubrication—Transmission and differential lubricants—change to those lubricants recommended by an authorized car dealer or a reputable oil company. Vehicles having Hypoid rear axle should be serviced with special lubricants and changed every 5,000 miles. Most of the leading, authorized dealers and oil companies are familiar with the servicing of a Hypoid rear axle. Follow their recommendations.

Chassis lubrication should be done on the schedule recommended by the vehicle manufacturer.

Repack front wheel bearings on schedule.

Radiator Anti-Freeze Fluid—Radiators always should be cleaned by an authorized service garage before installing anti-freeze. Hose connections in water pumps should be carefully inspected to be sure they will last through the winter. In using last winter's anti-freeze, it should be carefully strained and cleaned of all foreign material and the cooling system should be refilled with the proper amount of anti-freeze to stand at the safe, low temperature.

Heaters and Defrosters—Heaters that have been in the car during the summer

Traffic Deaths Exceed War Toll

"More war workers have been killed in traffic accidents since Pearl Harbor than the total number of United States combat forces killed on all fighting fronts," Robert E. Raleigh, Evanston, Ill., acting director, safety division, International Assn. of Chiefs of Police, declared at the organization's 50th annual conference at Detroit last month.

"There have been 40,000 persons, 22,500 of them war workers, killed in traffic accidents since Pearl Harbor," said Mr. Raleigh. "The number of United States war dead in the same period totals about 16,000. In addition to the 40,000 killed, 1,400,000 have been injured, 100,000 of them permanently."

should be cleaned and the fan overhauled. Defroster hose should be checked and connections at windshield openings secured.

Grill Covers—Turn down on cold days and up on warm days. Never add cold water while engine is hot.

Exhaust System—Gas is either blown into the car by the cooling fan or pushed through the floor board or other crevices from the air pressure generated by the car's motion. The exhaust system should be checked regularly during the winter to avoid any carbon monoxide dangers.

Felt can be used around the clutch, brake pedal and steering column, and floor boards may be tightened and should have a good mat over them.

Windshield Wiper—Use only when necessary. A windshield wiper can be pepped up (if it is a vacuum type) by letting the vacuum suck in some light oil. The suction tube should be disconnected and dipped into the oil. Then work the wiper by hand until the oil has been sucked up. Leather parts in this type of wiper are thus limbered up and tend to swell.

Conclusions—Even though these data are not a large sample of the total fleets or vehicles in use throughout the country, they may be indicative of the availability of winter vehicle equipment. Fleets should place orders for winter equipment and their shops should be in the process of reconditioning and salvaging old equipment to insure as much safety as possible for drivers while they are on the streets and highways during this coming winter.

To Build

The Wald Transfer & Storage Co., which recently purchased a tract of land adjoining its premises in Houston, at a reported price of \$12,000, has announced plans to construct a 4-story warehouse at a cost of \$400,000, as soon as priorities can be obtained, according to K. M. Wald, president. (Smith)



COMPETENT

• A one-word description of the personnel of our thirty-nine-year-old organization, which is operated on the theory that its trained and experienced employees are its greatest asset, despite a large investment in buildings and modern handling equipment.

Consign cars to yourselves in our care via any railroad entering the city. Terminal Railroad Association delivery. Reciprocal Switching.

S. N. LONG WAREHOUSE
ST. LOUIS, MO



**COMPACT
COMPLETE
COMPETENT**

ST. LOUIS, MO.



for
conscientious
handling of
fine furniture

Ben Langan

Storage & Moving
5201 DELMAR

ST. LOUIS, MO.

**RUTGER STREET
WAREHOUSE, INC.**
MAIN & RUTGER STS.

A.D.T. Burglar & Sprinkler Alarms.
200,000 Sq. Feet of Service
BONDED Low Insurance

Merchandise Storage and
Distribution.

Track Connections with All
Rail and River Lines.

Offices:
New York
W Urray Hill 9-7645
Chicago
Randolph 4458



ST. LOUIS, MO.



**SLOAN'S
MOVING AND STORAGE CO.**

5619 DELMAR BLVD., ST. LOUIS, MO.

70,000 Sq. Ft. of MODERN floor space. Fireproof, sprinklered, heated. Every load fully insured. Complete expert service "To and from Everywhere." Bonded. Exclusive agents United Van Lines, Int.

SEND in your postal zone number so we can list you correctly in annual Shippers' Directory to be published in January. —D and W



Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

Tyler Warehouse & Cold Storage Co. Merchandise and Cold Storage

Unexcelled service at lower rates

Pool Car Distribution and Forwarding

200 Dickson St. St. Louis 6, Mo.

Member of A.W.A.—Mo.W.A.—St.L.M.W.A.

SEDALIA, MO.

Owner Manager Responsibility

MIDDLETON STORAGE

118 N. Lamine St. Phone 946 Sedalia, Missouri

Household Goods and Commercial
Storing, Moving, Crating, Packing
and Shipping.

Local and Long Distance Hauling
Pool Car Distribution Private Switch



SPRINGFIELD, MO.

GENERAL WAREHOUSE CORPORATION

601 N. National Ave., Springfield, Missouri
Phone 236

Merchandise and Household Goods
Storage and Distribution
100,000 square feet, sprinklered
Pool Car Distributors

Member Mo.W.A.



Member AMERICAN WAREHOUSEMEN'S ASSOCIATION

In the Heart of St. Louis Industrial and Wholesale Districts



Compare the FACTS of our service point by point with those of any other warehouse before you buy warehousing service in St. Louis.

Warehouse facilities, switching, location, protection, special space, cleanliness, switchboard, order dept., stock control, and a dozen other features are the reasons for our reputation and growth - - -

"Service That Excels"

Send for complete folder

ST. LOUIS TERMINAL WAREHOUSE CO.



GENERAL OFFICES

826 CLARK AVE.
ST. LOUIS 2, MO.
MAIN 4827

NEW YORK OFFICE
259 PARK AVENUE
PLAZA 3-1235

CHICAGO OFFICE
53 W. JACKSON
HARRISON 1496

Clearing House For Freight Bills

(Continued from page 16)

loss because of the prompt and efficient method of collection, and rapid follow-up on any delinquencies.

The local office expects to handle about 10,000 bills daily, running into about a million and a quarter dollars per month of collections. An additional feature of Transport Clearings is that it will clear the bills of members on shipments exchanged between them. It works like a bank clearing house.

Shippers here are said to be pleased with the plan, since it also simplifies their office routine, a great gain at this time of crucial man- and woman-power shortages on the West Coast.

A Transport Clearings set-up is in operation at Portland, Ore.; another at Twin Cities, St. Paul, Minn. Both are reported to be "highly successful." (Gidlow)

Container Co. Expands

Container Co. of Van Wert, O., division of Continental Can Co., Inc., has purchased a building from the Reading Iron Co., Reading, Pa., to meet the increasing demands for its patented fiber drums and barrels for dry products, in sizes ranging from three-fourths gallon to 75 gallons. (Kline)

Shippers Testify for Motor Carriers At Rate Hearings Held in California

SAN FRANCISCO—Hearings are still being held in San Francisco and Los Angeles on the California Railroad Commission's proposal to fix maximum rates for trucking. The surprise at the latest San Francisco hearing was the testimony of shippers, apparently indicating that they do not wish to have maximum rates established at this time.

Among the shippers who opposed the CRC proposal to set a ceiling on rates here were officials of the Northern California Hay and Grain Assn., who stated they were not being overcharged; Farm Bureau representatives, who thought this an inauspicious time to tamper with rate structures; Northern California Cement Mill representatives, who testified to the unusual nature of many of the jobs truck operators are called on to do in connection with military construction, etc.; and men from many other fields.

Some shippers pointed out that any CRC rate order would have to be approved by OPA, and present conditions seemed to point to this being unlikely because of the discrepancy between CRC and OPA rulings and attitudes. As the San Francisco hearing drew to a close,

E. M. Berol, legal representative for the Truck Owners' Assn. of California, said he would present a motion at the forthcoming Los Angeles hearing to dismiss the proceedings; J. F. Vizzard, attorney for the Draymen's Assn. of San Francisco, signified that he would support the motion.

Truck operators believe that the testimony of the shippers on their behalf will go a long way to kill the CRC maximum rate proposal. (Gidlow)

Motor Transport Co. Acquired by Tiernan

George H. Tiernan has acquired control of the Motor Transport Co., Milwaukee, Wis., by purchase of the outstanding stock from the Milwaukee Electric Railway & Transport Co., it was announced recently by S. B. Way, chairman of the board of Motor Transport Co.

The firm is a motor freight carrier operating in southeastern Wisconsin whose stock was acquired by the Milwaukee Electric Railway & Light Co., predecessor of the present Transport and Electric companies, in 1931.—(WTNB)

SAE Air Cargo Meeting

(Continued from page 21)

as the best or only carrier for all time nor do we think it at the other extreme. To us they are a logical contender for any portion of the business which they can most efficiently provide."

Protection from Friends

Fred Carpi, assistant general traffic manager, Pennsylvania Railroad, also expressed disagreement with Dr. Frederick with respect to the Railway Express Agency. "I firmly believe," he said, "that the commercial airlines and the Railway Express Agency if left alone can work together most effectively. Once their economic spheres are clearly discernible there should be no difficulty in establishing a firm mutuality of interest."

Concerning the growth of the aviation industry Mr. Carpi said: "It has risen from infancy to giant stature in a remarkably short period of time. It should have no difficulty in making a success, but as is so often the case it needs more protection from its friends than from its enemies."

Helicopters

In the absence of W. B. Stout, presi-

dent, Stout Research Laboratories, Waldo Waterman, director of research of that organization, spoke on helicopter operations. He said that helicopters should not be compared with other types of aircraft. The helicopter, he emphasized, is still in the early experimental stage and is about what the airplane was in 1904 or 1905.

Banquet

Speakers at the banquet, at which C. S. (Casey) Jones, president, Casey Jones School of Aeronautics, was toastmaster, included Mayor Edward J. Kelly of Chicago, Mac Short, president, SAE, and the Hon. Wm. A. M. Burden, special aviation assistant to the Secretary of Commerce.

"Air cargo is going to be developed in a far different economic and social environment than we have ever known," Mr. Burden said. "We must not tie our thinking to the pre-war domestic and world climate. We cannot grasp the post-war possibilities of air cargo from the pre-war air cargo situation. Nor do estimates of the existing surface traffic which might be shifted to the air provide a good picture of the future scope for air cargo."

If . . .

"I think we can hope to achieve a rate to the consumer of 10c. to 20c. per ton mile in the not too distant future. Figures on past surface traffic show what might be shipped by air in the future if

—and this is the critical point—if shippers are going to be doing the same things in the same way and on the same general scale as they have in the past.

"It is certain, however, that the kind of products we make, our technologies of production and distribution, will be very different in the future. Any estimate of air cargo which neglects this fact must, of necessity, be far wide of the mark."

Civil Air Patrol

(Continued from page 24)

valleys and looking up at the tilted pockets in the mountains.

The courier service has become well known at almost every field in the country. The light planes use a minimum of rubber on their small landing wheels and burn no more gas than the family auto. They can land where big planes cannot, do short hauls with great economy, and serve as feeders to long distance airlines. Moreover, the light planes and volunteer pilots are virtually the only untapped transportation resources in the country.

In an experimental 30-day test of the courier service conducted at Middletown, Pa., by the Pennsylvania Wing for the Army, five planes flew more than a 1,000,000 lb. miles of Army cargo in the first 10 days of the mission, despite bad weather. They flew to points as far

HASTINGS, NEBR.

MEMBER 1876 1943

BORLEY'S
 Storage & Transfer Co., Inc.
 Pool Car Distribution
 FIREPROOF BONDED
 STORED OR SHIPPED

LINCOLN, NEBR.

1889 54 Years of Continuous Service 1943
 Merchandise and Household Storage—Pool Car Distribution
 We operate Thirty Trucks and have connections to all points in the State.
 Our buildings are clean, both Fire and Non-Fireproof, located on the lines of the C. B. & Q.—Mo. Pacific and Union Pacific with all other lines entering either city, absorbing switching.
 We are Bonded by the State—Our Rates are reasonable. We solicit your business and guarantee satisfaction. Investigation invited.
SULLIVANS
 Transfer & Storage Co. Lincoln, Nebr. 304 N. 8th Street
 Grand Island Storage Co. Grand Island, Nebr. 311 W. 4th Street



GORDON
 Storage Warehouse, Inc.
Merchandise and Household Goods
 Four modern, sprinklered warehouses, located on trackage. We handle pool cars, merchandise and household goods. Trucking service. Let us act as your Omaha Branch.
 Main Office, 702-12 So. 10th St., OMAHA, NEBR.
 Member: A.W.A.—N.F.W.A.
 Agents for Allied Van Lines, Inc.

OMAHA, NEB.

FORD
STORAGE & MOVING COMPANY
 1024 Dodge Street Omaha, Nebraska
 Omaha's most modern, centrally located warehouse. Fireproof construction—Fully sprinklered—Low Insurance. Sidings on I.C. R.R. and C.P. R.R. U. S. Customs Bond. General Merchandise—Cooler Storage—Household Goods Storage. Also operate modern facilities in Council Bluffs, Iowa. Our own fleet of trucks for quick deliveries.
 Member of N.F.W.A. and A.W.A.
 Represented by
 NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
 11 WEST 42ND ST. NEW YORK 36-0000 1315 NEWBERRY AVE. CHICAGO 33

OMAHA, NEB.

Member: American Chain of Warehouses, Inc.
KNOWLES STORAGE CO.
 901-911 Davenport St.
 MERCHANDISE — HOUSEHOLD GOODS
 Complete Warehousing and Distribution Service.
 Fireproof Building . . . Trackage . . . Motor Trucks

OMAHA, NEB.

802-812 Leavenworth Street
MOREWOOD WAREHOUSE
 Exclusive Merchandise
 Complete Distribution—Storage Facilities

MANCHESTER, N. H.

Make Our Warehouse Your Branch Office for Complete Service in New Hampshire
NASHUA, N. H. CONCORD, N. H.
McLANE & TAYLOR
 Bonded Storage Warehouses
 Offices 624 Willow St.
 General Merchandise Storage & Distribution, Household Goods, Storage, Cold Storage, Unexcelled Facilities, Pool Car Distribution
 Direct R. R. Siding, Boston & Maine R. R.

JERSEY CITY, N.J.

On the Hudson River Directly Opposite New York City

HARBORSIDE WAREHOUSE COMPANY, Inc.

Tel. Bergen 4-6000

Thirty-four Exchange Place

Executive and Sales

R. B. M. Burke, V.-P.

Established 1923

Office: 66 Hudson St.

John J. Mahoney, Y. M.

New York, New York

Phone: Barclay 7-6600

FACILITIES—3 units—fireproof, brick, and concrete. Private siding, Penna. R.R. connecting with all roads entering city. Merchandise Stge.—mfg. and office space 1,650,000 sq. ft.; sprinkler; automatic fire alarm; ins. rate .099; rail siding—20-car capacity; platform capacity—40 trucks. Cold Stge.—coolers 1,608,000 cu. ft.—freezers 1,182,000 cu. ft.—total 2,790,000 cu. ft., convertible; automatic fire alarm; ins. rate .06; brine refrigerator system; temp. range 0 to 50° F.; cooler room ventilation; humidity control; 20-truck platform; rail siding 16-car capacity. Water Dock Facilities—waterfront dock 600 ft.; draft min. 21 ft.; also pier berth 600 ft.; bulkhead draft 25-30 ft.

SERVICE FEATURES—Free lighterage, pool car distribution. Rental of office space. Storage-in-transit. All perishable products accepted for cold storage. Free switching on certain perishable products. Bonded space available. American Export Line steamers dock at piers adjacent to warehouse. Consign rail shipments to storer c/o Harborside Warehouse Co., Jersey City, Pennsylvania R.R., Henderson Street Station D'y.

ASSNS.—A.W.A. (Cold Stge. Div.); W. A. Port of N. Y.; Mar. Assoc.; N. Y. Mer. Exch.; Com. & Ind. Assoc. N. Y.; Jersey City C. of C.

NEWARK, N. J.

MEMBER: N.J.F.W.A. and N.F.W.A.

PACKING!

MOVING!

STORAGE!

dependable since 1860

• **KNICKERBOCKER** •
STORAGE WAREHOUSE COMPANY

96 to 106 ARLINGTON STREET

74 to 76 SHIPMAN STREET

Wm. R. Mulligan, Pres.

James E. Mulligan, Sec'y and Mgr.

NEWARK, N. J.

Member of N.I.M.W.A.

Newark Central Warehouse Co.

General Offices: 110 Edison Place, Newark, N. J.

In the heart of Newark—serving New Jersey and the entire Metropolitan Area. Sprinklered—low insurance rates. Central R.R. of N. J. 30 car siding. 25 motor truck delivery platform. Motor Freight Terminal. Merchandise automobile storage—branch office facilities.

POOL CAR DISTRIBUTION

Represented by
NEW YORK: ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PH. 6-0967 1015 NEWBURY AVE. MO. 5-3218

PATERSON, N. J.

Industrial Warehouse & Storage Co.

Specializing in Textile Warehousing

8 Morris Street, Paterson, N. J.

220 Straight Street, Paterson, N. J.

Sprinklered throughout—watchman service—fire-proof buildings
Rail and truck facilities—North, South, East, and West
Telephones: Sh 2-1916-7-8 Ch 4-5616-7 N. Y. Office: 450 7th Ave.

PATERSON, N. J.

Established 1896

ROBERT H. McDONALD CO.

General Offices: 156-21ST AVE.

General Merchandise Storage and Distribution for Northern New Jersey

Specializing in the distribution of canned merchandise to wholesale grocers

Pool Car Distribution—R. R. Siding D., L. & W. R. R.

PERTH AMBOY, N. J.

NEW YORK CITY

HARRIS WAREHOUSES, INC.

RECTOR ST., PERTH AMBOY

Gen. Offices — 246 South St., N. Y. C.

Est. 1900

Merchandise Storage and Distribution

Dock and Pier Facilities within the Free Lighterage Limits

GIFTS

This year, the most appropriate gifts that anybody can give are war bonds

NORTHERN NEW JERSEY

Newark, Elizabeth
and Jersey City

4 WAREHOUSES TO SERVE
New Jersey and New York Area
LEHIGH WAREHOUSES



Lehigh at Newark, N. J.

Internal Revenue bonded.
Complete liquor facilities,
ageing, weighing for tare,
bottling and labeling.
Pennsylvania Railroad
Siding.



Lehigh at Elizabeth, N. J.



Lehigh at Brooklyn, N. Y.

Centrally located to serve quickly all sections of New York City. Dockage on East River. Free lighterage limits in New York Harbor. Served by B.E.D.T. Railroad, also all trunk line railroads.

Whatever your sales plans—present or post-war, to distribute in this market, one of these strategically located warehouses will do the job for you—more economically—more efficiently.

Write today—put this organization to work for you.

LEHIGH WAREHOUSE & TRANSPORTATION CO., Inc.

Brooklyn, N. Y. • Newark & Elizabeth, N. J.

Offices: CHICAGO: 219 E. North Water St., Superior

7180 and 53 W. Jackson Blvd., Harrison 1496.

SAN FRANCISCO: 625 Third St., Sutter 3461.

All warehouses served by our own fleet of modern trucks

LACKAWANNA WAREHOUSE COMPANY, Inc.

Jersey City, N. J.



Lackawanna at Jersey City

Across the River from New York City. Convenient to all steamship lines. Storage in transit. Served by D. L. & W. Railroad.

SEE LISTING UNDER NEW YORK CITY

NEW MEXICO—NEW YORK

ALBUQUERQUE, N. M.

SPRINGER TRANSFER COMPANY ALBUQUERQUE

Operating the Only Fireproof Storage Warehouse
in New Mexico

Complete and efficient service in distribution, delivery
or storage of general merchandise or furniture.

Member of N.F.W.A.—A.W.A.

ALBANY, N. Y.

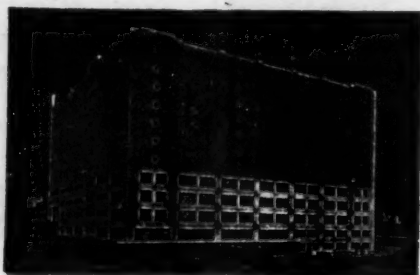
Albany Terminal & Security Warehouse Co., Inc.

Main office: 1 Dean Street

Storage for every need. Pool cars a specialty. Avail-
able storage space for rent if desired. Direct track con-
nections with all railroads running into Albany.

Member American Warehousemen's Association

ALBANY, N. Y.



CENTRAL WAREHOUSE CORPORATION

Colony and Montgomery Sts., Albany, N. Y.
Telephone 3-4101

ALBANY, N. Y.

JOHN VOGEL Inc.

FIREPROOF WAREHOUSES
OFFICES, 11 PRUYN ST.

HOUSEHOLD GOODS . . . STORAGE AND SHIPPING.
FLEET OF MOTOR TRUCKS FOR DISTRIBUTION OF ALL KINDS
POOL CAR DISTRIBUTION OF MERCHANDISE
YOUR ALBANY SHIPMENTS CAREFULLY HANDLED
Collections promptly remitted

BROOKLYN, N. Y.



EMPIRE STATE WAREHOUSES COMPANY
ABSOLUTELY FIREPROOF WAREHOUSES

GENERAL MERCHANDISE STORAGE

Specializing in Food Products
Offices: 390-398 Nostrand Avenue, Brooklyn, N. Y.

10 Giant Floors. Modern Loading and Unloading Facilities.

BROOKLYN, N. Y.

Warehousing and Distribution

- Reinforced Concrete Buildings
- Heavy Floor Loading Capacity
- Insurance 5c. Base Rate
- Connecting Rail Facilities

HORSTMANN WAREHOUSE & TRUCKING CORP.

379—38th St., Brooklyn, N. Y.

SOuth 8-4633-4

BUFFALO, N. Y.

GENERAL MERCHANDISE STORAGE—DISTRIBUTION

SIX
RAIL — LAKE — CANAL TERMINALS
ERIE — NYC — BUFFALO CREEK R. R.
HEATED SPACE OFFICES — MANUFACTURING

Eastern
Representative
Interlake Terminals, Inc.
271 Madison Ave.
New York 16, New York



Western
Representative
American Chain of
Warehouses, Inc.
53 West Jackson Boulevard
Chicago 4, Illinois

BUFFALO MERCHANDISE WAREHOUSES, INC.

GENERAL OFFICES

1200 NIAGARA STREET

BUFFALO 13, NEW YORK

BUFFALO, N. Y.

Economical Storage and Shipping

KEYSTONE WAREHOUSE CO.

515-541 SENECA STREET, BUFFALO 4, N. Y.

Served by Great Lakes Transit Corp. Steamers,
N. Y. Barge Canal Lines and all R. R's.
Capacity 50 cars daily. Pool car distribution.

One of THE CHAIN OF TIDEWATER TERMINALS and Inland Warehouses

away as South Carolina and Georgia, and demonstrated that rapid transport could carry a pound 100 miles for 10c.

In urgent cases the small planes carry a considerable load. For instance, a plane from the York, Pa., courier station, where there is no commercial airline stop, was sent to Worcester, Mass., to bring back a 300 lb. grinding wheel needed immediately in York for war production. The pilot found the wheel weighed all of 400 lb., but he loaded it in and brought it back against head winds, thus preventing a work stoppage of several days.

Pilots flying courier service under Army orders do not consider their own comfort; sometimes not even their own safety. The only matter left to their own discretion is the decision whether conditions are too bad for flying. In spite of this, they have flown when commercial planes were grounded, in thunderstorms and windstorms that tossed the planes like chips, and taken off from snowy fields where four attempts were required for getting into

the air. So far they have lost 3 men killed on the inland missions.

Moves Traffic Office To New York

The general traffic office of American Home Products Corp., manufacturer of drugs, toilet preparations, food products and numerous articles in the wax, polish, and hardware trades, has been moved from Jersey City, N. J., to 22 E. 40th St., New York City, according to an announcement made by Alvin G. Brush, Chairman of the Board. In recent weeks, the principal offices of a number of American Home Products subsidiaries have also been transferred to the New York address.

Geo. O. Griffith, general traffic manager, is in charge of this office which has general supervision over the transportation of raw materials and the distribution of more than 5,000 products manufactured and sold by the various subsidiary companies. The department conducts negotiations for the corporation with

various railroads, steamship lines and highway carriers and makes appearances as well before railroad, highway and steamship rate committees and federal and state transportation regulatory bodies.

The traffic work of the corporation is handled through district traffic offices in Jersey City, N. J.; Philadelphia, Pa.; Rochester, N. Y.; Mason, Mich.; Cincinnati, O.; Chicago, Ill.; Atlanta, Ga.; Los Angeles and San Francisco, Cal. The corporation also maintains a district traffic office in Walkerville, Ontario, for its Canadian subsidiaries.

Changes Name

Boyle Mfg. Co., Los Angeles, lightweight steel fabricating subsidiary of U. S. Steel Corp. on Pacific Coast, has changed name to United States Steel Products Co., and has contracted to purchase the assets of Petroleum Iron Works Co., subsidiary of American Republic Corp. The latter firm has plants at Sharon, Pa., Beaumont and Port Arthur, Tex. (Herr)

Effect of Air Cargo On Distribution

(Continued from page 27)

caution of strong packing boxes necessary. It was not unusual to find that on some articles weighing 75 lb., an export box weighing 30 lb. was required. This meant that the large weight equalled as much as 30 per cent of the weight of the product packed in the container.

Containers and Costs

With the air transport it may be possible to devise sufficiently strong containers that will hardly weigh more than 10 per cent of the weight of the product going into them.

Any success in bringing down the gross weight of a shipment by as much as 20 per cent through lighter materials of which the product or the container are manufactured, may mean sizable reduction in the charges that air carriers will have to assess.

With these anticipated reductions in weight of shipments destined for air transport economy is likely to arise from indirect sources. Where carting becomes necessary in connection with pick-up and delivery, the charge by the surface carrier performing such services to and from airports can be less than on heavily boxed shipments with identical quantities of products.

Damage also is likely to be less with lighter packed shipments for air transport. This should reflect lower insurance charges.

In some foreign countries, the customs duties are levied on the gross weight of shipments. In such instances, the lighter packing suitable for air transport should make possible attractive savings to dealers and consumers.

While the purpose of reducing the weight of the container is to reduce the charge assessed by the air carrier on the shipment, an indirect benefit results from that action. The lighter container will often be found to cost less than the heavier type. Numerous instances will

be found where a heavy container costing \$1.75 can be replaced by a lighter one costing only 75c.

Weight and Time

Weight also has a significance with certain products. Allowance has to be made for loss from evaporation in certain products exposed to sun or heat during the longer surface trips. The ability to reduce by airplane the time of such exposure will also diminish the amount of weight loss as a costly item of commerce in various goods.

Among the four factors determining air transport suitability of a product, the one of weight involves re-orientation all along the line from the shipper's viewpoint.

Distance is the remaining factor of air transport suitability to be considered. Reference will be made to it as well as to certain changes likely to open new fields to all engaged in distribution and warehousing activities in the air age of the future in the January issue of *DandW*.

BUFFALO, N. Y.

Knowlton Warehouse Co.

50 Mississippi Street, Buffalo, N. Y.

POOL CAR DISTRIBUTION
MERCHANDISE STORAGE
PRIVATE SIDING

BUFFALO, N. Y.

Let us care for your needs in Buffalo

LARKIN WAREHOUSE INC.

BUFFALO, N. Y.

Specializes in handling pool cars. Lowest insurance rates. Stores autos and No cartage on railroad shipments. general merchandise

GOVERNMENT BONDED WAREHOUSE

BUFFALO, N. Y.

LEDERER TERMINALS

... HAVE SOMETHING IN STORE for you ...
LOCATED IN NIAGARA FRONTIER FOOD TERMINAL

BUFFALO, N. Y.

MEMBER



LEONARD WAREHOUSES

Offices—163 Georgia St.

Household Furniture—Storage and Removals—
Local, Long Distance — Special Storage and
Handling of Electrical Appliances for Merchandising Purposes

Member
B.W.A.—
Mayflower
W.A.

BUFFALO, N. Y.

Salesminded

THE MARKET TERMINAL WAREHOUSE

Schoellkopf & Co., Inc.
102 Perry St.

BUFFALO, N. Y.



BUFFALO OFFICE
390 ELM STREET • TEL. WA. 6494

**NORTH AMERICAN
VAN LINES, INC.**
Long Distance Moving

BUFFALO, N. Y.

GENERAL MERCHANDISE—COLD STORAGE WAREHOUSE

Cargo-Handling
Rail-Lake and Barge
Terminal
96 Car Track
Capacity
1500 Feet Private
Dock



Financing—
Distribution
Auto Dealers
Warehousing
Service
Office and
Factory Space

TERMINALS & TRANSPORTATION CORPORATION

275 FUHRMANN BLVD. BUFFALO, N. Y.

BUFFALO, N. Y.

WILSON WAREHOUSE CO.

Gen. Offices: 290 Larkin St., Buffalo 10

General Merchandise Storage and Pool Car Distribution
Fireproof Buildings Low insurance rates. N.Y.C. Siding Branch office facilities.

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. NEW YORK 18-0966 1523 NEWBERRY AVE. MOH353

ELMIRA, N. Y.

A. C. RICE STORAGE CORP.

2—WAREHOUSES—2
MERCHANDISE—HOUSEHOLD GOODS
Pool Cars—Truck and Van Service



MEMBER
AWA—NEWA—ALLIED VAN LINES

NEW YORK

FLUSHING, L. I., N. Y.

Established 1908

Flushing Storage Warehouse Company

135-28 39th Avenue, Flushing, N. Y.

Fireproof Warehouses



Moving, Packing, Storing and Shipping of Household Goods and Office Equipment, 10 blocks from L. I. Railroad Corona Freight Station. Serving Jackson Heights, Elmhurst, Corona, Whitestone, College Point, Bayside, Douglaston, Great Neck, Little Neck, Port Washington, Manhasset, Hempstead, Garden City.

Members of the A.V.L.—N.F.W.A.—N.Y.F.W.A.—N.Y.S.W.A.

HEMPSTEAD, L. I.

HARRY W. WASTIE—Vice-Pres. & Gen. Mgr.

HEMPSTEAD STORAGE CORP.

GENERAL OFFICES, 237 MAIN STREET

Branch Warehouse No. 2—226 Nassau Road, Roosevelt, L. I.

FIREPROOF STORAGE WAREHOUSES

For household goods, merchandise, Pool car distribution.

Storage for furs, clothing, etc.

Local and Long Distance moving. Serving all of Long Island.

Member of N.F.W.A.—N.Y.F.W.A.—N.Y.S.W.A.—L.I.N.S.A.

Agents for Allied Van Lines, Inc.

JACKSON HEIGHTS, N. Y.

FRED G. KELLEY INC.

FIREPROOF WAREHOUSE

37-60-81st Street, Jackson Heights, N. Y.

MOVING • PACKING • SHIPPING

For Service on all of Long Island

MEMBERS: Nat'l Furn. Warehousemen's Assn., N. Y. Furn. Warehousemen's Assn., Allied Van Lines, Inc.

JAMESTOWN, N. Y.

H. E. FIELD, President FRANK H. FIELD, Mgr.

WILLIAM F. ENDRESS, INC.

66 Foote Ave., Jamestown, N. Y.

MERCHANDISE STORAGE • COLD STORAGE

Specializing: Cream, Frozen Fruits, Vegetables, Meats, Etc.

4500 Sq. Ft. Merchandise Storage Space. 85,000 Cu. Ft.

Cold Storage. Sidings and Truck Docks. Consign shipments via Erie R.R. 25-ton Truck Weigh Scale. Members

Nat. Assn. Refrigeration Warehousemen, N. Y. State Assn. Refrig. Warehousemen.

KEW GARDENS, L. I., N. Y.

Telephone, Republic 9-1400

Kew Gardens Storage Warehouse, Inc.

Motor Vans, Packing, Shipping

Fireproof Storage Warehouse

9330 Van Wyck Boulevard at Atlantic Ave.

Richmond Hill, N. Y.

NEW ROCHELLE, N. Y.

Moving, Packing

Storing, Shipping



O'Brien's Fireproof Storage Warehouse, Inc.

Packers and Shippers of Fine Furniture and Works of Art

Also Serving

New Rochelle, Pelham, Larchmont, Mamaroneck, White Plains, Scarsdale, Hartsdale. Send B/L to us at New Rochelle.

NEW YORK, N. Y.

ALPHA

FIREPROOF STORAGEHOUSES, INC.

MOVING—PACKING—SHIPPING

HOUSEHOLD COMMERCIAL

EDGECOMBE 4-7750

3243-47 BROADWAY, NEW YORK 27, N. Y.



Member NATIONAL FURNITURE WAREHOUSEMEN'S ASSN. Agent ALLIED VAN LINES, INC.

CHELSEA FIREPROOF STORAGE WAREHOUSES, INC.

We specialize in storage and transfer of Household Goods. Pool cars distributed. Our warehouses, brick and steel construction, offer highest degree of safety. Trucks, trailer, tractor and lift van. Consign via all R.R.'s sta. New York. For Mt. Vernon, consign via N.Y.C.-N.Y.N.H&H sta. Mount Vernon.

N.F.W.A. — N.Y.F.W.A. — N.Y.S.M.T. — M&W.A.G.N.Y.

Main Office — 426-438 West 26th St., New York City

N. Y. C., East Side—28 Second Ave. Larchmont—111 Boston Post Rd.

Mount Vernon—27-33 So. Sixth Ave. Bronxville—100 Pondfield Rd.

NEW YORK, N. Y.

COLUMBIA STORAGE WAREHOUSES

and BYRNES BROTHERS WAREHOUSES.

Incorporated

Consign Household and Merchandise direct. Private siding five cars N.Y.C. R.R. Storage in transit privileges. 275,000 sq. ft.

General Offices:

149 Columbus Ave. New York City

Legal Questions Answered

(Continued from page 32)

the warehouseman protected by a limitation clause, particularly if the clause is not in conspicuous type, or the owner did not sign the receipt or his attention was not directed to the clause.

Night Watchman . . .

Question: In your address before the warehouseman's convention in Chicago you stated that some warehousemen need not employ night watchmen, but that other warehousemen should do so to avoid liability. What is the difference in this liability?—Oak Storage.

Answer: The warehouseman's situation always is considered by the court when deciding whether the warehouseman was negligent in failing to provide a watchman, whether during day or night.

Recently a higher court held that a

warehouseman may be held liable in damages for fire losses, if the evidence indicates that the warehouse contained valuable merchandise and at the time the fire started in day time no employee was detailed to act as watchman. This is particularly true if other prudent and reasonably careful warehouseman, having warehouses in towns of the same population, would have employed watchmen.

For example, in *Mexia, v. Speight*, 142 S.W. (2nd) 439, the owner of stored merchandise, destroyed by fire, proved that the fire occurred at or near the noon hour. At that time all of the warehouse employees were congregated in one corner of the warehouse building, and no employees were at or near the place where the fire started.

The jury held the warehouseman liable because it decided that he was negligent since the warehouse contained a large amount of valuable merchandise, and the court decided that he had negligently failed to keep such lookout for fire as an ordinary and prudent warehouseman

would have done under the same circumstances.

In other cases where the warehouse is located in a small town the higher courts have held that a warehouseman is not negligent for failure to provide a night watchman, because the profits from operation of the business would not justify the expense.

Responsibility

Question: Several months ago the writer was called in by a Mr. Pickett who gave us an order to take some of his things into storage; also he gave us a shipment which he said should be put in storage under the name of the Connecticut Investment Trust and asked us to bill them in care of F. W. Thompson.

We, of course, followed these instructions and after billing Mr. Thompson for what was due us on the account back in 1942, he advised us that he was not responsible for payment of the charges. He stated that he only instructed Mr. Pickett to apply for receivership and

NEW YORK, N. Y.

Fireproof Storage Warehouses



Dunham & Reid Inc.

The storing, packing, moving and shipping of Household Goods and Art objects is attended to on a basis of quality. Dunham & Reid Service surrounds the shipper at all times with a greater margin of Safety and Security. Low insurance rates. Prompt remittances. Located in the heart of New York.

216-218 East 47th Street

New York City

Members of N. F. W. A., N. Y. F. W. A., V. O. A.

NEW YORK, N. Y.

SERVING THE NEW YORK MARKET

There is no problem in Warehousing and Distribution which we cannot work out satisfactorily with the shipper. We have advantages in location and in equipment which enables this company alone to do certain things which cannot be done elsewhere.

We invite your correspondence on any or all features of our Warehousing—Distribution—Trucking Service—Field Warehousing.

Independent Warehouses, Inc.

General Offices: 415-427 Greenwich St., New York 13

* Represented by

NEW YORK

ALLIED DISTRIBUTION INC.

CHICAGO

11 WEST 42ND ST. PHIN. 6-0067

1525 NEWBERRY AVE. MON. 5531

NEW YORK, N. Y.

INTERLAKE TERMINALS, INC.

Complete distribution service

Representatives of member warehouses located in Buffalo, Chicago, Cleveland, Detroit, Green Bay (Wis.), Houston, Kansas City, Los Angeles, Milwaukee, Muskegon (Mich.), Portland (Oregon).

271 MADISON AVENUE 16

H. J. Lushbaugh, Mgr.

Phone Murray Hill 5-8397

NEW YORK, N. Y.

KAY MOVING SERVICE, INC.

2464 Amsterdam Ave., New York City

Household Goods Storage

2 Warehouses, brick & concrete construction

Pool Car Distribution—Commercial—

Industrial and Long Distance Moving

Member of N.A.W.A.—N.Y.S.W.A.—U.N.Y.W.A.



NEW YORK, N. Y.

KINDERMANN FIREPROOF WAREHOUSES

1360-70 Webster Avenue, New York 36

Conveniently located for shipments by rail to Manhattan, Bronx and Westchester Counties.

Members National and New York Furniture Ware-

housesmen's Association

Agents for Allied Van Lines

Telephone—Jerome 7-0194

GEORGE KINDERMANN, President



NEW YORK, N. Y.

SERVICE—EFFICIENCY—CLEANLINESS

L. & F. STORES, INC.

GENERAL STORAGE WAREHOUSES

15-17-19 WORTH ST.

Merchandise Distribution

LOUIS MAURO

Bonded Truckmen and Forwarders

Phone Walker 5-9253

NEW YORK, N. Y.

THE NATIONAL COLD STORAGE CO., INC.

Operating Warehouses for Storage of Perishable Food Products

DISTRIBUTION FACILITIES—BONDED AND FREE

Brooklyn Warehouse Adjacent to Pier and Wharf Accommodations

BROOKLYN, 96 Furman St. (2)

JERSEY CITY, 176 Ninth St. (2)

Fulton Terminal—N. Y. Dock Railway

Erie Railroad—Storage-In-Transit

General Offices: 60 HUDSON ST., NEW YORK 13, REctor 2-6590

NEW YORK CITY Metropolitan Area including New Jersey

Jersey City, New Jersey

(Across the Hudson River)

LACKAWANNA Warehouse Company, Inc.



Lackawanna at Jersey City

Centrally located to reach either uptown or downtown New York City—quickly. Convenient to all steamship lines. Storage in transit. U. S. Customs bonded space. Lackawanna R. R. Siding. Low cost for rental space. Low insurance rate.

Brooklyn, New York

LEHIGH Warehouse & Transportation Co., Inc.

Strategically located in this area to serve New York City and adjacent territory quickly and economically. Dockage on the East River. Free light-



Lehigh at Brooklyn, N. Y.

erage limits in New York Harbor. Brooklyn Eastern District Terminal Siding, served by all trunk line railroads. U. S. Customs bonded space. Special rooms for the storage of wines. Insurance rate 7.2 per C.

These warehouses are a part of the Lehigh and Lackawanna distribution organization that is serving many of the nation's manufacturers both large and small with their distribution problems in this market of 26,000,000 people.

Offices: CHICAGO: 219 E. North Water St., Superior 7180 and 53 W. Jackson Blvd., Harrison 1496.
SAN FRANCISCO: 625 Third St., Sutter 3461.

All warehouses served by our own fleet of modern trucks

TWO OTHER STRATEGIC LOCATIONS

Located here are the general offices, sales and accounting departments. Served by Lehigh Railroad. Insurance rate .06 per C.



Lehigh at Elizabeth, N. J.



Lehigh at Newark, N. J.

Internal Revenue bonded. Complete liquor facilities, ageing, weighing for tare, bottling and labeling. Pennsylvania Railroad Siding.

See Northern New Jersey for further information

wind up the affairs of the trust company. We went to Mr. Pickett who denied any responsibility and still claimed that the Connecticut Investment Trust should be looked to for payments.

Therefore, this has remained open on our books until our bill as of June 28, 1943, in the amount of \$40.50 was mailed to Connecticut Investment Trust. The question we would like to have answered is, which one of these, in your opinion, is responsible to us for the storage due on Connecticut Investment Trust? West Haven Trucking Co.

Answer: It is my opinion that Pickett is liable if you can prove that Thompson instructed him to apply for receivership and not store the goods. However, evidently both Thompson and Pickett have opposite contentions. Therefore, since Pickett states that Thompson instructed him to store the goods and Thompson denies this statement, it seems that it is advisable for you to consult a local lawyer who preferably has had experience in court procedure involving warehousemen's law and instruct him to file a suit making Pickett, Thompson and the trust companies parties to the suit and the court will decide whether or not Pickett was instructed by Thompson to store the goods.

If the court decides in favor of Pickett then he only acted as agent for Thompson who may be held liable for payment of the storage charges. However, if the

goods belong to the trust company, and Thompson was authorized to act in capacity of a representative, the trust company is responsible.

Trucking Groups Fight New Highway Barrier

Three midwestern motor carrier organizations, the Illinois Motor Truck Operators Assn., Indiana Motor Truck Assn. and Central Motor Freight Assn., have joined forces for a legal contest of a recently passed Gary, Ind., city ordinance requiring all trucks making pickups or deliveries in Gary to purchase a license costing from \$5 to \$25.

Involved in the issue is the question of a municipality's right to tax both interstate and intrastate motor carriers for use of a city's streets. A victory for the city of Gary, it is also pointed out, might result in passage of similar ordinances by other municipalities, in an effort to replace revenues lost because of reduced automobile activity.

In Cook County, Ill., alone, immediately surrounding Chicago, there are 180 villages, and in citing this fact, Walter McCarron, general manager of the Illinois Motor Truck Operators Association, commented that "If all cities and towns were to impose license fees on trucks domiciled in other communities

for the purpose of using their streets, we would have an impossible situation. No trucking company could pay such fees and stay in business."

Conferences between the trucking association attorneys and Gary officials succeeded in postponing the effective date of the ordinance to Jan. 1. Meanwhile an injunction suit is planned and, if necessary, the issue will be carried to the Supreme Court, it was announced. (Slawson)

Aircraft Manufacturer Producing Inner Tubes

The Glenn L. Martin Company, aircraft manufacturer, has begun production on a mass scale of an elastic-plastic inner tube for automobile tires, the chief ingredient of which is coal, limestone, salt and water.

In addition to the manufacture of the plastic tube, the Martin concern also has begun the production of plastic surgical gloves and nipples for babies. A now-idle tire plant in the mid-West is being used for this purpose.

The company is undecided whether it will continue production of the tube after marketing of the product has started or whether it will license other companies under the patents on the elastic-plastic substance which the company has named Marvinol. (Ignace)

NEW YORK, N. Y.

CAPITAL AND SURPLUS
\$5,600,000

ESTABLISHED
1882

GENERAL MERCHANDISE STORAGE

EASY ACCESSIBILITY QUICK HANDLING
EXCELLENT LOADING FACILITIES NEW YORK'S LARGEST TRUCK SCALE
TWO MODERN FIREPROOF WAREHOUSES
SPRINKLED SECTIONS LOW INSURANCE RATES

Seventh
Avenue
at 32nd
Street
N.Y.C.

The Manhattan
STORAGE & WAREHOUSE CO.

Third
Avenue
at 80th
Street
N.Y.C.



Member NATIONAL FURNITURE WAREHOUSEMEN'S ASSN.
Agent ALLIED VAN LINES, INC.

NEW YORK, N. Y.

Storage, Distribution and Freight Forwarding
from an Ultra-Modern Free and Bonded
Warehouse.

IDEALLY LOCATED

IN THE VERY CENTER OF NEW YORK CITY
Adjacent to All Piers, Jobbing Centers
and The Holland and Lincoln Tunnels

Unusual facilities and unlimited experience in forwarding
and transportation. Motor truck service furnished
when required, both local and long distance. Lehigh
Valley R.R. siding—12 car capacity—in the building.
Prompt handling—domestic or foreign shipments.

MIDTOWN WAREHOUSE, INC.

Starrett Lehigh Bldg.

601 West 26th St., N. Y. C.

Represented by Associated Warehouses, Inc.—New York City and Chicago

NEW YORK, N. Y.

NEW YORK DOCK COMPANY

Executive Offices — 44 Whitehall St., New York, N. Y.

Free and Bonded Warehouses
Manufacturers and Distributors space for lease
Piers and Wharves
Railroad Connections
Licensed by Cocoa, Cotton, Coffee and Sugar
Metal and Rubber Exchanges.
Member: A.W.A.—W.A.P. N.Y.—N.Y.S.W.A.—N.Y.W.W.T.

NEW YORK, N. Y.

PORT WAREHOUSES, INC.

41/47 Vestry St. Tel. WA 3-3077-78 54/58 Laight St.

U. S. BONDED AND FREE WAREHOUSES

ALSO TEA BOND

In the heart of the Canned and Bag Goods District
of the Port of New York
Two fumigation Chambers

NEW YORK, N. Y.

SANTINI BROS., INC.

Serving Greater New York and All Points in
Westchester County

MOVERS—PACKERS—SHIPERS

General Offices: 1405-11 Jerome Ave.

Tel.: JEROME 6-6000 Five Fireproof Warehouses
3,000,000 Cubic Feet—Pool Car Distribution



NEW YORK, N. Y.

130,000 Sq. Ft. Fireproof Storage

SHEPHARD WAREHOUSES INC.

DAILY DISTRIBUTION SERVICE TO
ALL POINTS RADIUS 35 MILES

667 Washington St.

New York City 14

STARRETT-LEHIGH BUILDING



Outstanding as its dominance over New York's West Side midtown skyline, the STARRETT-LEHIGH BUILDING offers the manufacturer and distributor superior advantages:

- Lehigh Valley R. R. freight terminal on street level; elevators direct to rail yard platform
- Truck elevators to all floors, affording street floor facilities throughout
- Floor area, 52,000 to 124,000 sq. ft. Smaller units may be leased
- High safety standard—low insurance rates
- Live steam for manufacturing purposes
- Fast passenger elevators; restaurant; barber shop

INVESTIGATE —learn what satisfied, nationally-known occupants are doing at the

Starrett-Lehigh Building

West 26th—West 27th Sts.—11th to 13th Avenues
D. R. CROTSLEY, Manager, 601 West 26th Street
Telephone: CHickering 4-8520

NEW YORK, N. Y.

Branches in Phila., Boston, Jersey City

UNITED SECURITY ASSOC. WAREHOUSES, INC.
243 W. 60 St.—N. Y. C. Circle 7-3177

Specializing in:

HOUSEHOLD GOODS

Storage • Distribution • Trucking • Packing
Foreign Lift-Van Service

OSWEGO, N. Y.

OSWEGO NETHERLAND CO., INC.

ESTABLISHED 1918

Modern up to the minute DRY, COLD and Sharp Freezer facilities with ventilation and humidity control. Temperature Range for COLD and Sharp Freezer facilities 15 to 95° above. Storage-in-transit privileges.

All Fireproof buildings—Very low insurance rates. 90 car private siding—Free switching—U. S. Warehouse Act—Bonded. Member of N.Y.S.R.—A.W.A.S.

H. B. Lasky, Treas. and Mgr.

ROCHESTER, N. Y.

GEORGE M. CLANCY CARTING CO., INC.

Storage Warehouse

Main St., East at Circle St.

General Merchandise Storage—Distribution

Pool Cars Distributed—Reshipped

U. S. Customs Bonded—Storage—Drayage

Household Goods Moved—Stored—Shipped

Direct R.R. Siding N. Y. Central in the Center of Rochester

SCHENECTADY, N. Y.

Schenectady Storage and Trucking McCormack Highway Transportation

Offices: 151 Erie Blvd., Schenectady 5

General Merchandise Storage and Distribution
Pool Car Distribution Household Goods
Storage and Moving Long Distance Trucking

Watch Your Earnings On Investment

(Continued from page 28)

many business concerns, although few managements realize it.

For example, consider the condensed recapitulation of Company B's profit and loss statement and balance sheet for 1942, which follows:

Sales	\$300,000
Net profit on sales in percentage.....	.06%
Net profit on sales in dollars	\$ 18,000
Assets	\$200,000
Liabilities	50,000
The capital investment or net worth....	\$150,000
Suggested limit on capital investment profit06%
Would limit dollar profit to.....	\$ 9,000
Net profit on sales in dollars.....	\$ 18,000
Ceiling on capital investment profit in dollars	9,000
Differential deducted from profit	\$ 9,000

From this it may be seen that if Company B's profit on capital investment were limited to 6 per cent, it could earn only \$9,000, or 3 per cent on sales, instead of 6 per cent. These figures show clearly that much dynamite lies in the suggestion to limit returns on capital investment. Some few might benefit, many would not.

Worth Study

With the tax situation what it is, with frantic attempts being made to get income to pay current government obliga-

tions, there is no telling what source the legislators will tap if the old well runs dry. There is sufficient indication that a ceiling on capital investment profit is being considered to make it worth while for anybody to absorb the fundamentals of this problem.

Contrast Company B's position with that of Company C. A condensed recapitulation of its profit and loss statement and balance sheet follows:

Sales	\$200,000
Net profit on sales in percentages.....	.06%
Net profit on sales in dollars.....	\$ 12,000
Assets	\$400,000
Liabilities	100,000
The capital investment or net worth....	\$300,000
Suggested limit on capital investment profit06%
Would limit dollar profit to.....	\$ 18,000
Net profit on sales in dollars.....	\$ 12,000
Ceiling on capital investment profit....	18,000

Company C is earning only 4 per cent on capital invested, whereas, Company B earns 12 per cent, hence, B is, by far, more efficiently managed, but, under a 6 per cent limit on capital investment profit, B would be controlled to cut net profit on sales to 3 per cent and turn over the difference, \$9,000, to the government, whereas, C could retain all the net profit earned, \$12,000.

Would Be Penalized

Company C is not making its invested dollars work hard enough, indicating inefficient management or watered assets,

which give an inflated figure on invested capital. Company B, because it is more efficient, because it has been conservative in recording balance sheet figures, would be penalized if the proposed ceiling on investment profit is decreed. This would certainly distort the general conception of modern business operation and tend to put a damper on efficiency. In peace or war, it is bad business to crack down on efficient management because this is as much a necessity of war as is effective supervision of industrial output.

A ceiling on capital investment profit to get revenue to operate the government, would bring major reactions, over which businessmen everywhere would do well to ponder.

Controls May Continue

The business man of tomorrow must be far better equipped from a managerial standpoint to stay in business because normal economic movement seem likely to be supplanted by artificial decrees for some time to come. We must learn to conform to a more complicated routine if we expect to make satisfactory profits. From the information given in this article, it is apparent that the earnings on capital investment represent an important element of business analysis and should be watched carefully from now on.

WARNS SYNTHETIC TRUCK TIRES ARE LESS DURABLE THAN NATURAL

The McCreary Tire & Rubber Co., Indiana, Pa., has warned fleet operators not expect service from synthetic tires comparable with that from natural crude rubber tires.

The warning is based on research to date by the entire rubber industry, it is said, and experience on test tires by McCreary. Not only does the performance drop sharply with the bigger truck tires, it is stated, but the destructive effect of over-loading and high speed are far more severe in synthetic tires than with natural crude rubber. The reason is due to the tendency of synthetic rubber tires to generate greatly increased internal heat.

"The use of synthetic rubber in making truck tires will soon become necessary as the natural rubber stockpile is rapidly being depleted," the manufacturer states. "We are going to make the best truck tires we know how to make from synthetic rubber, but we cannot, nor can any other tire manufacturer, guarantee what kind of service you will get out of synthetic truck tires. We can only give you a guarantee against defective workmanship.

"We would certainly suggest that all truckers take steps to prepare for the time they will be getting tires made from

synthetic. Some of the important steps to take are as follows:

"1. Weigh your loads and arrange to carry the proper load per tire as recommended by the Tire and Rim Assn. This means that you absolutely must not have any overload. The 20 per cent overload heretofore permitted by ODT must be revoked. In fact, to get proper service you should underload. If you wish a chart showing weight per tire, we will be glad to send it to you. 'Weight per tire' means total gross weight, as actually determined by weighing each axle. 'Guessing' is out, real facts must be used exclusively with synthetic tires.

"2. Reduce your speed to 35 miles an hour at all times. This doesn't mean an average of 85 miles—it means you should never travel over 35 miles an hour.

"3. Arrange a system to see that the air in tires is properly maintained and checked, before each trip.

"We cannot too forcibly impress on all of our customers the vital necessity of doubling and re-doubling right now the time and attention you give to tire care, if you are to avoid having many of your trucks completely tied up for lack of tires within the next two to eight months."

Current industry test work indicates, it is said, that small truck tires (6.00 x 16, etc.) will perform about 65 per cent as well as pre-war tires under present operating conditions.

Medium sized truck tires (sizes up to 8.25 x 20) will perform about 55 per cent as well as pre-war rubber tires under present operating conditions.

Large truck tires will perform only about 25 to 55 per cent as well as pre-war tires under present operating conditions.

Receives Charter

The Virginia State Corporation Commission has granted a charter to the Warehouse and Industrial Corp., Norfolk, Va. Maximum capital of the firm is \$50,000. A Turock of Norfolk is president.

Link-Belt Purchase

The Link-Belt Co. of Chicago has purchased the manufacturing plant and inventory of the Link-Belt Supply Co., which has acted as its distributor in the Minneapolis area since about 1900. Present manufacturing facilities will be improved and inventories expanded as rapidly as practical, according to company officials. Ray S. Wood, director of Link-Belt's positive drive division since 1925, will be manager of the Minneapolis plant. (Wimmer)

SYRACUSE, N. Y.

GREAT NORTHERN WAREHOUSES, INC.

• FIREPROOF •

MERCHANDISE STORAGE and DISTRIBUTION
2 PRIVATE RAIL SIDINGS

DAILY, STORE-DOOR, MOTOR FREIGHT SERVICE TO ALL NEW YORK STATE POINTS

Member: American Chain of Warehouses—MayWA

SYRACUSE, N. Y.

DISTRIBUTION
MOTOR FREIGHT LINES
PRIVATE RAIL SIDINGS

KING

STORAGE WAREHOUSE, INC.
SINCE 1897

ERIE BLVD. AT SO. WEST ST., SYRACUSE 1

COMPLETE MERCHANDISE AND HOUSEHOLD GOODS STORAGE

Represented by
DISTRIBUTION SERVICE, INC.

SERVICES

Members:

A.W.A.—N.F.W.A.—A.V.L.

UTICA, N. Y.

BROAD STREET WAREHOUSE, INC.

Complete Warehousing
Service

General Merchandise — Cold Storage
Heated Storage

Private Siding and Motor Freight Terminal
Daily Trucking Service to all
Points in New York State

UTICA, N. Y.

Established 1916

UTICA WAREHOUSE CO., INC.

Box 276

Utica, N. Y.

MERCHANDISE STORAGE

Specializing in Cotton, Cotton Waste, Textiles, Alkalies,
Denatured Alcohol, Anti-Freeze, Automobiles, Etc. Ware-
houses on D.L.&W. and N.Y.C. Private siding. Sprin-
kled throughout. Pool car distribution. Motor service.

WHITE PLAINS, N. Y.

J. H. EVANS & SONS, INC.

Office & Warehouse: 107-121 Brookfield St.

Household Goods Moving, Storage, Packing, Shipping

Prompt service for any point in Westchester County

Member N.Y.P.W.A.—N.F.W.A.

CHARLOTTE, N. C.

AMERICAN STORAGE & WAREHOUSE CO. CHARLOTTE, N. C.

OFFICE AND WAREHOUSE, 926 TUCKASEEGEE ROAD

MERCHANDISE STORAGE ONLY. POOL CARS DISTRIBUTED.
MOTOR TRUCK SERVICE LOCAL AND DISTANCE. PRIVATE
RAILROAD SIDING. SPRINKLERED.

ESTABLISHED 1908

CHARLOTTE, N. C.

Carolina Transfer & Storage Co.

1230 W. Morehead St., Charlotte 1, N. C.

Bonded fireproof storage.

Household goods and merchandise.

Pool cars handled promptly. Motor Service.

Members A. W. A. and N. F. W. A.

CHARLOTTE, N. C.

All buildings fully fireproof construction

UNION STORAGE & WAREHOUSE CO., Inc. BONDED

224-226 & 306-308 West First Street

MERCHANDISE STORAGE — POOL CAR DISTRIBUTION

Member of A.W.A.—Motor Service

DURHAM, N. C.



DURHAM PUBLIC WAREHOUSES, INCORPORATED

2002 East Pettigrew St., Durham, N. C.
Merchandise & Household Goods Storage. Pool Car Distribution. Private Sidings. Reciprocal Switching. Sprinklered Buildings.
Member: American Chain & Whses.; A. W. A.

GREENSBORO, N. C.

Member MAYWA



Champion Storage & Trucking Co., Inc.

326-28 South Davie St., Greensboro, N. C.
Merchandise & Household Goods
Pool Cars—Trucking Service
Sprinkler System — Private Siding
Represented by American Chain of Warehouses, Inc.

RALEIGH, N. C.

CAROLINA STORAGE & DISTRIBUTING COMPANY
MERCHANDISE STORAGE
POOL CAR DISTRIBUTION

Private Siding Motor Freight Line
Members A. W. A. A. CHN. WHSES.

WILMINGTON, N. C.

FIREPROOF WAREHOUSE



FARRAR TRANSFER & STORAGE WAREHOUSE

1121 South Front Street
Household Goods — Merchandise
Long Distance Moving — Pool Car Distribution
Private Siding, A. C. L. Railroad Co.
Members, N. F. W. A. — A. T. A.

FARGO, N. D.



Union Storage & Transfer Company

FARGO, N. DAK.

General Storage—Cold Storage—Household Goods
Established 1906

Three warehouse units, total area 161,500 sq. ft.; of this 29,320 sq. ft. devoted to cold storage. Two buildings sprinkler equipped. Low insurance costs. Spot stocks. Pool car distribution. Complete warehouse services. Fargo serves North Dakota and Northwestern Minnesota.

Offices 806-10 Northern Pacific Ave. AWA-NFWA-MNWWA-ACW

GRAND FORKS, N. D.

AWA-NFWA-MNWWA

Kedney
WAREHOUSE CO.

Local and Long Distance
Hauling of Freight
and Household Goods

General Storage—Moving Household Goods
Pool Car Distribution—Motor Freight Terminal

AKRON, OHIO



COTTER CITY VIEW STORAGE COMPANY

70 Cherry St., Akron 8, Ohio

Merchandise Storage.
A.D.T. Alarm.
Pool Car Distribution.
Household Goods Storage.
Low Insurance.

Member of May.W.A.—O.W.A.—A.W.A.

CANTON, OHIO



CANTON STORAGE, Inc.

FOURTH AND CHERRY, N.E.

Merchandise, Household Goods, Cold Storage
Pool cars distributed. Private sidings.
Free switching on all roads. Separate fireproof warehouses for household goods.
Member: A.O.W.—MAY.W.A.—A.W.A.—O.F.A.—O.W.A.



CINCINNATI, OHIO

90 YEARS OF WAREHOUSING

Cincinnati Merchandise Warehouses, Inc.

7 W. Front St. Cincinnati, Ohio

Merchandise Storage—Pool Car Distribution
P.R.R. & Sou. R.R. Sidings—Low Insurance Rates
Air Conditioned Space—U. S. Customs Bonded



Represented by ALLIED DISTRIBUTION INC. CHICAGO
18 WEST 42ND ST. NEW YORK 36-0000 1313 N. WABASH AVE. CHICAGO 10



CINCINNATI, OHIO

Member of A.W.A.—O.W.A.



9,000,000 Cubic Feet Strictly Fireproof

Select the Warehouse Used by the Leaders!

GENERAL STORAGE—COLD STORAGE—POOL CAR DISTRIBUTION—LONG DISTANCE TRUCK TERMINALS
11 Car Switch in Building

Internal Revenue and General Bonded Storage

Insurance Rate 14 1/2 c per \$100 per annum

CINCINNATI TERMINAL WAREHOUSES, INC.

49 CENTRAL AVE. HARRY FOSTER, General Manager CINCINNATI, O.

CINCINNATI, OHIO

FERGUSON MOVING & STORAGE CO.
5225 MADISON RD. • 1220-1232 HARRISON AVE.



NORTH AMERICAN VAN LINES, INC.
Long Distance Moving

CINCINNATI, OHIO

CINCINNATI'S NEWEST WAREHOUSE

QUEEN CITY WAREHOUSE

42 MAIN STREET CINCINNATI 2, OHIO

CONCRETE AND MASONRY CONSTRUCTION
DRY CELLARS
ENCLOSED SIDING
SPRINKLERED THROUGHOUT
POOL CAR DISTRIBUTION
SAMPLE ROOMS

Insurance rate: 12.6¢ per \$100 on 80% Co. Insurance and 12.0¢ on 90%
Fumigation Service in Connection

CLEVELAND, OHIO

CURTIS STORAGE & TRANSFER, INC.



"STORE WITH CONFIDENCE"

Specializing in Merchandise Storage
Pool Car Distribution—Bulk Tank Storage
Operating Own Delivery Equipment
Private Siding N.Y.C.R.R.

FRENCH & WINTER STS. CLEVELAND, OHIO

CLEVELAND, OHIO

"An old organization with young ideas"

THE GREELEY-GENERAL WAREHOUSE COMPANY



located in the
New York Central Freight Terminal
BROADWAY AND EAST 15TH STREET



CLEVELAND, OHIO

Now there are
WATER, RAIL AND TRUCK FACILITIES

4 LEDERER TERMINALS

Cleveland's Only Lakefront Public Warehouse with Direct
Connecting R.R. Facilities
Member of O.W.A.

Offices: FOOT OF E. 9th ST.
A.D.T. Protection

Member NATIONAL FURNITURE WAREHOUSEMEN'S ASSN.
Agents ALLIED VAN LINES, INC.

DIRECT FROM FREIGHT CARS

SHIPMENTS to Cleveland, consigned to The Lincoln Storage Company over any railroad entering the city, can be handled from freight car direct to our loading platform.

Carload shipments to our private siding, 11201 Cedar Ave., on the N. Y. C. Belt Line, connecting with all R.Rs. entering Cleveland; L. C. L.-Penna. Euclid Ave. Sta. adjoining Euclid Ave. warehouse; other R.Rs. to Cleveland, Ohio.

LINCOLN STORAGE
N. R. Thomas, Pres.
 CLEVELAND

5700 Euclid Ave. 11201 Cedar Ave.

CLEVELAND, OHIO

A GREAT COMBINATION!

NEAL in Cleveland
MAYFLOWER coast to coast

Ask about our facilities on storage of merchandise as well as household goods.

Exclusive Agent: Greater Cleveland for Aero-Mayflower Transit Co.

The NEAL Storage Company
 7208 Euclid Avenue Cleveland

CLEVELAND, OHIO

TEL. CHERRY 4170

Member of A.W.A.

NATIONAL TERMINALS CORPORATION

1200 WEST NINTH STREET

Three Modern Fireproof Buildings—Two with Dock Facilities on Cleveland's Water Front
 Most Economical Warehouse and Distribution Services
 VIA WATER—RAIL—TRUCK ARE AVAILABLE THROUGH
 Cleveland's Largest Cold and General Merchandise Warehouse



CLEVELAND, OHIO

The OTIS TERMINAL WAREHOUSE
HAS THE FACILITIES TO MEET ALL OF YOUR NEEDS

Downtown location; Modern and fireproof; Low insurance rates; Enclosed docks and siding on Big 4 Railroad; Daily delivery service; Office and display space; Telephone accommodations; U.S. CUSTOM BONDED.

General Offices 1340 West Ninth St.

CLEVELAND, OHIO

RAILWAY WAREHOUSES, Inc.

in CLEVELAND, OHIO

For Facilities, Service and Security

Write for Details

Address 3540 Croton Ave., S. E., Cleveland 15, Ohio

COLUMBUS, OHIO

Established in 1882

Columbus Terminal Warehouse Company

55-85 Terminal Way

Columbus, Ohio

Modern warehouses and storage facilities.
 A.D.T. System. Private double track siding.
 Free switching from all railroads.



Represented by **ALLIED DISTRIBUTION INC.**
 NEW YORK 11 WEST 42ND ST. PHIL. 6-0967 CHICAGO 11325 NEWBERRY AVE. MOBILE 28

People . . .

Roger D. Lapham, former member War Labor Board and chairman of the board of American-Hawaiian Steamship Co., was elected Mayor of San Francisco by a plurality of nearly 33,000 votes over his leading rival, George R. Reilly, who had the support of the CIO and the Union Labor party of the AFL. Mayor Rossi ran third.

Martin F. Mahoney, superintendent, Lackawanna Warehouse Co., Inc., Jersey City, N. J., since 1929, has retired because of ill health, and has been succeeded by **Irvin Miller**, formerly superintendent, Lehigh Warehouse and Transportation Co., Inc., Brooklyn, N. Y. **Michael Gargan** has succeeded Mr. Miller at the Brooklyn warehouse.

H. B. Plummer has been named president, Davies Warehouse Co., Los Angeles, succeeding **Charles T. B. Jones**, who had reached the retirement age. Mr. Plummer served as president of the Houston Terminal Warehouse & Cold Storage Co., at Houston, Tex., for the past 10 years. Prior to going to Houston he had been

active in the warehouse field in Southern California as an associate of the late **Gerald Fitzgerald** in the management of the Associated-Banning Co. and the De Pue Warehouses. (Herr)

Arthur C. Schier has been elected General Foods Corp. vice president in charge of traffic. Mr. Schier has been connected with traffic and transportation since his employment in Cleveland in 1916 with the Nickel Plate R. R. He joined General Foods in 1935.

Correction: It was inadvertently stated last month that the Freight Traffic Institute of Chicago has started an air transport course. The item should have stated that the **College of Advanced Traffic**, 14 E. Jackson Blvd., Chicago, has started a course in air transport. **Mel T. Brockman**, area air cargo manager, United Air Lines, is the instructor. He will be assisted by other air line traffic men. We apologize for the confusion.

New officers of the Long Island Moving & Storage Assn. are as follows:

Henry Bertolotti, Richmond Hill, president; **Frank Maffucci**, Lynbrook, vice president, and **Henry Brengel**, Hicksville, secretary-treasurer.

John N. Levins, Boston district manager, American-Hawaiian Steamship Co., and one of the nation's well known maritime authorities, has been named a member of the Boston Port Authority by Mayor Tobin. (Wellington)

William H. Day, manager, transportation bureau, Boston Chamber of Commerce, and **Henry F. McCarthy**, formerly with the Boston & Maine Railroad, now with the ODT, have been named by **Joseph B. Eastman**, director, ODT, to serve on the recently organized War Transportation Efficiency Committee. (Wellington)

John T. Griffin, chief pilot for Northeast Airlines, has been named operations manager both for the Atlantic and commercial divisions of the airline. (Wellington)

Earl de Blinde, American Airlines' Mexican official, is in New York City on part of his good will tour of the United States. Imports of Mexican materials into the United States and the shipping of American products to Mexico are problems with which Mr. de Blinde is chiefly concerned.

A. F. Manning, traffic manager, Douglas Aircraft Corp., Chicago, has been appointed chairman of the new Aeronautical Committee, organized by the Midwest Shippers Advisory Board to keep members informed of shipping conditions affecting the rapidly growing aircraft manufacturing industry in the Chicago area. (Slawson)

Frank J. Ticky has been appointed Chicago divisional manager of Schumacher Motor Express, Eau Claire, Wis. (Slawson)

Eleanor Ross, owner of the Advance Storage & Van Co., Chicago, has purchased the 3-story fireproof building at 5210-30 S. Wabash ave., which has housed her operations under lease for a number of years. The structure, erected in 1892, has a power house for Chicago's long-discarded cable car system, contains 60,000 sq. ft. of space and was obtained for a reported \$30,000. (Slawson)

Earl F. Wentworth, formerly traffic

manager, Holman Transfer Co., Portland, Ore., who entered the Signal Corps some time ago as second lieutenant, stationed at Philadelphia, has recently been promoted to a first lieutenantcy and is now senior officer in charge of a large army warehouse activity there. He is a graduate of Reed College, Portland, and during his association with the Holman Transfer Co. represented it as chairman of the Rate Committee, Portland Draymen & Warehousemen's Assn.

John J. Antun, affiliated with the Merchants Refrigerating Co. for the past 26 years, has resigned as vice president, and will join M. A. Ries and M. Munoz in Ries-Munoz & Antun, Inc., consultants in the frosted food industry. Mr. Antun, president, Eastern Frosted Foods Assn., began his career with the Merchants Refrigerating Co. as an office boy. In 1941 he was elected vice-president.

E. G. Plowman has been appointed vice president in charge of traffic of the United States Steel Corp. of Delaware, a newly-created post, effective Jan. 1. He has been traffic manager of Colorado Fuel & Iron Co. since 1937. (Kline)

Elmer G. Meyers has been named general agent of the Inter-State System, motor freight firm, at Columbus, O. Previously he was manager for LeCrone-Benedict Ways, Inc., at Columbus. (Kline)

Cpl. Frank H. Brown, Auxiliary Military Police, Pennsylvania-Central Airlines, Washington, D. C., a veteran of 22 years in the Regular Army, has lost a son and daughter in the Far East, and another son was seriously wounded in Sicily. Cpl. Brown served in the 10th Infantry in the Spanish-American War and in the Philippine campaigns of 1900-04. In the first world war he was twice gassed while serving with the 16th Infantry in France. His eldest son, William, was wounded at Bataan and evacuated by submarine to Australia where he died of his wounds. The daughter, Aileen, a captain in the Army Nurse Corps, and one of the last nurses evacuated from Corregidor by submarine, was killed in action in New Guinea. A younger son, John, a staff sergeant, is at Walter Reed Hospital recovering from loss of his left arm and shrapnel wounds of the back. Cpl. Brown has reason to be both sad and proud. To the country to which he had given so much, his children gave even more. . .

Andrew C. Nielsen, veteran Portland, Ore., shipping man, has returned to the steamship industry as district manager for Interocean Steamship Corporation, after spending almost two years as traffic manager for Kaiser Company, Inc., Swan Island yard. Appointment was made by Mrs. W. A. Springer, who has been serving as manager both for Portland and Seattle. Mrs. Springer will con-

COLUMBUS, OHIO

Consign Your Household Goods Shipments to
DAN EDWARDS at COLUMBUS
 Packing—Shipping—Storage—Local and Long Distance Moving—Steel and Concrete Warehouse—Private Siding

EDWARDS TRANSFER AND STORAGE CO.
 430 North High St., Columbus, Ohio

Member—National Furniture Warehousemen's Association
 Agent—Allied Van Lines, Inc.

COLUMBUS, OHIO

THE MERCHANDISE WAREHOUSE CO.
 370 West Broad St.
 Complete service for
 MERCHANDISE STORAGE AND DISTRIBUTION
 Private Siding NYC and Big Four
 14 Car Capacity
 Pool Car Distribution A.D.T. Service
 Centrally Located Modern Facilities
 Members: A.C.W.—O.W.A.

COLUMBUS, OHIO

The NEILSTON STORAGE CO.
 260 EAST NAGHTEN ST., COLUMBUS 15
 Modern warehouse for merchandise—Low Insurance—Central location in jobbing district—Private railroad siding—Pool cars distributed.
 Member of O.F.A.

MARION, OHIO

G. A. WRIGHT, Pres. & Mgr.
WRIGHT TRANSFER & STORAGE CO.
 126 OAK ST.
 Est. 1904
Merchandise—Household Goods
 Wright Service to Meet Your Requirements
 Member of N.F.W.A.—A.V.L.—O.F.W.A.

SPRINGFIELD, OHIO

WAGNERS SERVICE, INC.
 Pennsylvania Railroad and Lowry Ave.
 A warehouse service that embodies every modern facility for the storage and distribution of Household Goods and Merchandise—Motor Freight Service—Door to door delivery at Dayton, Springfield and Columbus daily.
 Member of A. W. A.—O. W. A.

TOLEDO, OHIO

GREAT LAKES TERMINAL WAREHOUSE CO.
 321-359 MORRIS ST. TOLEDO, OHIO
 COMPLETE WAREHOUSE FACILITIES

CAPACITY
 800—CARS COLD
 400—CARS DRY

PRIVATE SIDINGS
 N.Y.C. AND
 B.&O. RR'S

TOLEDO, OHIO

Merchants and Manufacturers Warehouse Co.
 Office and Main Warehouse: 15-23 So. Ontario St.
 BRANCH WAREHOUSE: 2131-51 Smead Ave.
 Center of Jobbing District
 Sprinklered Buildings—200,000 square feet Dry Storage—70,000 cubic feet Cool Storage—Private Sidings—Nikel Plate Road, New York Central—Free Switching, Merchandise Storage—Pool Car—Distribution—Negotiable Receipts—Transit Storage Privileges—Low Insurance Rate—City Delivery System.

OHIO—OKLAHOMA—OREGON

TOLEDO, OHIO

"QUICK SHIPPERS"

TOLEDO TERMINAL WAREHOUSE, INC.

128-138 VANCE STREET, TOLEDO, OHIO

Merchandise storage... Pool car distribution...
Fireproof... Private siding Nickel Plate Road...
Free switching... Negotiable receipts... Trans-
sit storage arrangements...
Motor truck service... Lo-
cated in Jobbing District...



MEMBERS: American Warehousemen's Association
Ohio Warehousemen's Association
Toledo Chamber of Commerce



Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PHON 6-0086 1525 NEWBERRY AVE. MON 553

YOUNGSTOWN, OHIO

CLIFFORD R. PAISLEY J. A. MINEHART W. E. BALLENTYNE
President Vice Pres. Secy.-Treas.

THE WM.
EST. 1887

HERBERT & SON CO.

Incorporated 1922



CRATING — PACKING — MOVING

ALLIED VANS STORAGE N.F.W.A.

Main Office: 646-652 Market St. — Branch Custer and Elm St.



OKLAHOMA CITY, OKLA.

Established 1889

O. K. TRANSFER & STORAGE CO.



GENERAL WAREHOUSING AND DISTRIBUTION

TULSA, OKLA.

JOE HODGES FIREPROOF WAREHOUSE

Merchandise Storage—Pool Car Distribution

Located in Center of Tulsa Wholesale District

Member: A.W.A., N.F.W.A. and American Chain of Warehouses

TULSA, OKLA.

R. W. PAGE, President

PAGE STORAGE & VAN LINES

1301 So. Elgin, Tulsa 5



Storage—Moving—Packing—Ship-
ping of Household Effects and
Works of Art—Silver and Rug Vaults



PORTLAND, ORE.

H. M. CLARK, Pres.

HOLMAN TRANSFER COMPANY STORAGE DISTRIBUTION

SINCE 1864

1306 N.W. Hoyt St., Portland 9

A.W.A.—O.S.W.A.

PORTLAND, ORE.

J. H. CUMMINGS, Pres.
MERCHANDISE, STORAGE &
WAREHOUSING

Northwestern Transfer Co.
General Forwarding Agents

SPECIAL ATTENTION GIVEN TO POOL CARS
Our private siding is served by all railroads

1504 N.W. Johnson St., Portland, Oregon

Estab. 1888

fine her activities to the Seattle office henceforth. She has been with the company here for the past 12 years, and is a leader among women executives. Mr. Neilsen was district freight agent in Portland for Panama-Pacific Line for six years, was with Lidell & Clarke, freight forwarders, for three years, and with Oregon-Pacific Salem Navigation Co. and Daly Bros. in traffic capacities. (Haskell)

John J. Toohy has returned to his post as manager of distribution for E. R. Squibb & Son, New York City, after completing nearly seven months of government service as head of the drugs, cosmetics, and soap section, Chemical and Drugs Branch, OPA. (Kline)

The following have been appointed committee chairmen for the Port of Philadelphia Maritime Society: L. T. Howell, Terminal Warehouse Co., reception; J. Paul Ryan, B. H. Sobelman & Co., publicity; F. K. Hartley, Hartley Coal Co., membership; James B. Doak, Conlan, LaBrum & Beechwood, legislative; George E. Bartol, Jr., Philadelphia Bourse, port advisory; C. S. Tompkins, Sobelman & Co., entertainment, and John M. Taylor, Taylor and Anderson, welfare. (Dash)

Herman Greenwood, vice president of U. S. Steel Export Co., has resigned to become vice president of the Carrier Corp., Syracuse, N. Y. (Kline)

Paul R. Breno has become manager of the Toledo, O., branch of National Car-loading Corp., succeeding C. C. Crocker, now with the Detroit Delivery Co. (Kline)

Charles Fankhauser, Brooklyn, N. Y., has been appointed both credit and traffic manager for Old Town Ribbon and Carbon Co., Brooklyn, N. Y. (Kline)

Appointment of William J. Halliday as mail and express traffic representative for the New York district of Transcontinental & Western Air, Inc., has been announced by S. E. Russ, Eastern regional mail and express manager.

OBITUARY

E. A. O'Donnell, 58, senior transportation rail officer of ODT, lately of Kansas City, but a former Houstonian, died in Council Bluffs, Ia., Nov. 8, of a heart attack suffered while making inspections at the Burlington Lines. He was born in Navan, Ontario, and began railroading with the Great Northern Railroad in 1901. Before leaving the Southern Pacific some years ago, he was superintendent of terminals at Houston. In 1942 he joined the staff of the ODT. (J. B. Smith)

Felix P. Vaccaro, 77, former president, Standard Fruit and Steamship Co., New Orleans, La., died Oct. 18 after a long illness. He retired as head of the fruit company 11 years ago. Coming to the

United States from Italy as a young boy he joined his older brothers, Luca and Joseph, as fruit venders on a modest scale. Later they developed fruit plantations in Central America and bought ships to carry their products to New Orleans, where they organized the Standard Fruit and Steamship Co. (Thompson)

Samuel E. Goddard, 72, retired traffic manager for Blodgett, Ordway & Webber Co., Boston, Mass., died Oct. 22. (Wellington)

Willard P. Shrake, 40, manager, McKinley Storage and Transfer Co., Canton, O., for the last 10 years, died Nov. 8. (Kline)

Harry F. Young, 47, traffic manager, Pillsbury Flour Mills Co., Minneapolis, Minn., died suddenly Nov. 9, of a heart ailment. (Kline)

Henry J. Schulderman, 65, corporation commissioner of Oregon, and formerly owner of the Merchants Express & Transportation Co., Portland, died Nov. 4 of a heart attack. (Haskell)

Ralph H. Shaffer, 60, founder of the Shaffer Terminals, Tacoma, Wash., and former owner of the American Automobile Co., died Nov. 1 of a heart attack. He was a native of Troy, O. (Haskell)

J. Frank Nickerson, 82, oldest active trade paper publisher in the United States and international authority on refrigeration, died Oct. 20 at his home in Chicago. Until illness interrupted his work recently, Mr. Nickerson had con-

OREGON—PENNSYLVANIA

PORTLAND, ORE.

OREGON TRANSFER COMPANY

Established 1868
1238 Northwest Glisan Street Portland 9, Oregon
U. S. BONDED and PUBLIC WAREHOUSES
Merchandise Storage and Distribution
Lowest Insurance Rates—Sprinkler Equipped
Member A. W. A.
Eastern Representatives Distribution Service, Inc.

PORTLAND, ORE.

COVER THE NORTHWEST
THROUGH

RUDIE WILHELM WHSE. CO., INC.

U. S. Bonded—Concrete Building—A. D. T. Sprinkler System
Complete Facilities for Storage and Distribution
of All Commodities

Free Switching from All Railroads Portland's Lowest Insurance Rates
New York, 271 Madison Ave. Member A.W.A.

ALLENTOWN, PA.

MEMBER



Only Large Fire-Retardant Warehouse in
Lehigh Valley

DIEHL STORAGE COMPANY

128-132 N. 8th ST.
HHG.—STORAGE—MDSE.
MOVING—CRATING—SHIPPING
F. WILLARD WOLFE, PRES. & GEN. MGR.

HARRISBURG, PA.

Incs 1902

MEMBER



HARRISBURG STORAGE CO.

Fire Retardant & Fireproof Warehouses
P.R.R. Sidings

Pool Car & Delivery Service

Represented by
THE AMERICAN CHAIN OF WAREHOUSES, INC.

HARRISBURG, PA.

KEYSTONE WAREHOUSE

GENERAL MERCHANDISE STORAGE
POOL CARS DISTRIBUTED
BRICK BUILDING—LOW INSURANCE
STORE DOOR DELIVERY ARRANGED FOR
PENNA. R. R. SIDING

OPERATED BY HARRISBURG WAREHOUSE CO.

HAZLETON, PA.

Est. 1915

MEMBER



KARN'S STORAGE, INC.

MERCHANDISE WAREHOUSE L.V.R.R. SIDING
Storage in Transit Pool Car Distribution
Packing — Shipping — Hauling
Fireproof Furniture Storage

Members: Mayflower W.A.—P.F.W.A.—P.W.A.

LANCASTER, PA.

LANCASTER STORAGE CO.

LANCASTER, PA.

Merchandise Storage, Household Goods, Transferring,
Forwarding
Manufacturers' Distributors, Carload Distribution, Local
and Long Distance Moving
Member of May.W.A.

PHILADELPHIA, PA.

Est. over 50 years.

Pool Car Distribution a Specialty

FENTON STORAGE CO.

Absolutely Fireproof 46th and Girard Ave.
Cable Address "Fenco"
P. R.R. Siding
Storage, moving and distribution of household goods and merchandise

PHILADELPHIA, PA.

Fidelity—20th Century Storage Warehouses



General Offices—1811 Market St., Philadelphia 3
Agents for Allied Van Lines, Inc.
Bus type vans for speedy delivery anywhere. We distribute
pool cars of household goods. Prompt remittance.
Assoc. N. F. W. A., Can. S. & T., P. F. W. A.

PHILADELPHIA, PA.

Established 1863

GALLAGHER'S WAREHOUSES

708 South Delaware Avenue
Merchandise Storage Storage in Transit
Direct Sidings—Penna. RR. and Reading RR.
Pool Car Distribution
Represented by Associated Warehouses, Inc.
New York Deliveries Chicago
52 Vanderbilt Ave. City and Suburban 549 W. Randolph St.
Murrayhill 9-7645 Randolph 4458

PHILADELPHIA, PA.

LOUDERBACK MOVING & STORAGE CO.
5909 TORRESDALE AVE. • PHILADELPHIA



**NORTH AMERICAN
VAN LINES, INC.**
Long Distance Moving

PHILADELPHIA, PA.

2,100,000 Square Feet

MERCHANTS WAREHOUSE CO.

10 Chestnut St., Philadelphia 6 Phone: LOM. 8070

11 modern buildings in leading business sections. Served by
all R.R.'s. Loading and unloading under cover. Storage-in-
transit privileges. Goods of all kinds, bonded and free.

One of THE CHAIN OF TIDEWATER TERMINALS and Inland Warehouses

WARTIME WAREHOUSING in Philadelphia

Over 1,000,000 square feet
of space in 22 modern warehouses, with every trans-
portation connection and the most modern handling
facilities. Large modern fleet for store-door service.

A complete set-up to meet and improve your Phila-
delphia storage and distribution problems, with
war-time economy. Full details on request.

PENNSYLVANIA WAREHOUSING & SAFE DEPOSIT CO.

4th and Chestnut Streets • Philadelphia 6

WARREN T. JUSTICE, President

MEMBER: A. C. W. A. W. A. P. W. A.

REPRESENTATIVES:

GEO. W. PERKINS,
82 Beaver St., New York, Wh 4-2287
J. W. TERREFORTE,
250 Park Ave., New York, Pl 3-1235
W. J. MARSHALL,
53 W. Jackson Blvd., Chicago, Har 1496



tinued as president and active head of Nickerson & Collins Co. In 1891, he started publication of "Ice and Refrigeration" which quickly became an important factor in the industry and a leader in its modern development. He continued as its editor and publisher up to the time of his death.

N. C. Truck Owners Elect New Officers

N. P. Strause of Vance Trucking Co., Henderson, N. C., was elected president North Carolina Truck Owners Assn. at the annual one-day convention of Tar Heel truckers recently at the Hotel Sir Walter, Raleigh, N. C. Other officers elected at the annual meeting were C. H. Smith, Smith's Transfer Co., Lenoir, first vice-president; R. L. Brinson, Atlantic States Motor Lines, Inc., High Point, second vice-president, and Frances Johnson of the association's Raleigh office, secretary-treasurer. The delegates also elected 32 directors, representing all

sections of the State, to serve during 1943-44.

A highlight of the session was the presentation, posthumously, of the American Trucking Associations' award for heroism to Fred Walkup and Thomas DeWitt Taylor, former drivers of Petroleum Transportation, Inc., Gastonia, for heroic action performed in an explosion at Fayetteville last July. The convention also recognized C. S. Schaub and O. W. Yates, Apex Motor Line, Apex winner in Class B-3 in the Ninth National Truck Safety contest of ATA.

T. Glenn Miller, Jr., of Lenoir presided at the loss and damage claims section meeting. "Truckers' money losses from lost and damaged goods are mounting daily," Miller declared. "The shortage of personnel and the inefficiency of the personnel obtainable are the two major factors contributing to these losses. Poor packaging is a third reason why much goods is lost and damaged."

The only direct action taken to meet the problem was the decision to have the

truckers check with one another and the connecting carriers monthly in an effort to decrease claims for loss and damage. (Hall)

New Steamship Firm Formed in Chile

A new Chilean steamship company, the Formento de la Production, with headquarters in Valparaiso, which will operate in the ore, general cargo and lumber trades between the west coast of South America and the United States, has been formed, according to information reaching San Francisco shipping men.

Although the Chilean merchant marine has been described as short of tonnage, three Chilean motorships have been sold to the United States for gold bars. The bullion has been deposited in the Central Bank in Santiago until the end of the war when other motorships will be purchased for Chile, the report said.

PHILADELPHIA, PA.

BUELL G. MILLER, President

MILLER

North Broad Storage Co.

BROAD & LEHIGH & BRANCHES
Member P.M.T.A., C.F.M.A. of Pa.

PHILADELPHIA, PA.



Member: P.M.T.A., C.F.M.A., P.F.W.A.

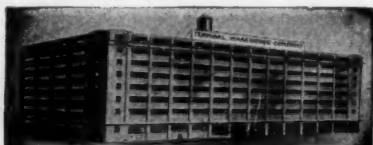
QUAKER

STORAGE COMPANY

2501 GERMANTOWN AVE., PHILA. 33

COMPLETE HOUSEHOLD
GOODS SERVICE

Agents for United Van Lines, Inc.



13 MODERN WAREHOUSES



-serving PHILADELPHIA AND VICINITY with Economy and Dispatch!

Strategically located throughout Philadelphia, they provide more than 68 acres of excellent storage space. Each building is equipped with every convenience, designed for the safe, prompt and economical handling of goods of every kind. All earn low insurance

rates. Special provision is made for the storage of household goods.

Served by both Pennsylvania Railroad and the Reading Company. Convenient to the big piers. Completely equipped pool car department is maintained.

Write for Particulars

Represented by
DISTRIBUTION SERVICE, Inc.

An Association
of Good Warehouses Located at
Strategic Distribution Centers

TERMINAL WAREHOUSE COMPANY

DELAWARE AVENUE AND FAIRMOUNT • PHILADELPHIA



Members: A.W.A.,



N.F.W.A., Pa.F.W.A.



2 Broadway, NEW YORK CITY
Phone: Bowling Green 9-0986

625 Third St., SAN FRANCISCO
Phone: Sutter 3461

219 E. North Water St., CHICAGO
Phone: Sup. 7180

PITTSBURGH, PA.

DUQUESNE WAREHOUSE CO.

Office: Duquesne Way and Barbeau St.
Merchandise Storage & Distribution

Members A. W. A.

PITTSBURGH, PA.

ED WERNER TRANSFER & STORAGE COMPANY

1917-19 Brownsville Road
Pittsburgh, Penna.

Storage, Packing and Shipping

Member of National Furniture Warehousemen's Ass'n.

Agent of Allied Van Lines, Inc.

SCRANTON, PA.

R. F. POST

DRAYMAN & STORAGE WAREHOUSE

221 Vine St., Scranton 3

HOUSEHOLD STORAGE POOL CARS
MERCHANDISE STORAGE PACKING
LOCAL AND LONG DISTANCE MOVING
PRIVATE SIDING, D. L. & W. R. R.

SCRANTON, PA.

THE QUACKENBUSH WAREHOUSE CO.

219 VINE STREET, SCRANTON 3
MERCHANDISE AND HOUSEHOLD GOODS
STORAGE POOL CAR DISTRIBUTION
D. L. & W. and D. & H. Sidings

NEW YORK CHICAGO
11 WEST 42ND ST. PH. 6-0948 1525 NEWBURY AVE. MON. 333

PITTSBURGH, PA.

THOMAS WHITE, Owner and Manager

2 WAREHOUSES

17th AND SMALLMAN STS.
13th AND SMALLMAN STS.

QUARTER MILLION FEET OF SPACE

*In the Heart of
Pittsburgh's
Jobbing District*

STORAGE IN TRANSIT
POOL CAR DISTRIBUTION
COMPLETE TRUCKING FACILITIES
PRR SIDINGS

Also operators of
WHITE MOTOR EXPRESS CO.

Established 1918

WHITE TERMINAL COMPANY

13th AND SMALLMAN STS.

Equipment Promises Unfulfilled on Coast

Definite promises of specified motor truck equipment for California carriers have not yet been fulfilled, industry leaders declare, and the equipment situation becomes more threatening daily. ODT told truck men they might expect agricultural vehicles, and a certain number of heavy duty trucks as well.

"We have seen none of these as yet," Roy B. Thompson, secretary-manager, Truck Owners' Assn. of California, recently stated, "despite the fact that all Government officials are warning us of unprecedented demands on West Coast transportation." (Gidlow)

Negotiations

Negotiations are reported underway for the purchase by the Aluminum Corp. of America of an interest in Pope & Talbot, Inc., Pacific Coast shipping firm.

The Aluminum Corp. (Alcoa), which operates smelting and milling facilities for aluminum in Los Angeles and Modesto, Calif., and Vancouver, Wash., also operates a shipping fleet in the Pacific, using terminal facilities of the McCormick Steamship Co., a Pope & Talbot subsidiary. The latter has managed the Alcoa fleet as agent since the war began. Pope & Talbot is one of the West Coast's oldest and largest lumber operators. (Herr)

"Plywood and Payload"

IN the trucking business its payload counts. That simple statement explains why most of the 35 moving vans of McLean the Mover, Tacoma, Wash., have bodies of Douglas fir plywood.

A carefully prepared chart shows that one of his newer moving vans, with body of plywood, weighs exactly 7,025 lb. fully equipped with ropes, pads, etc. That truck has a carrying capacity of five tons, or 1,200 cu. ft., enough to move the furniture of an average 5-6 room house.

Down the list there is another truck of the same chassis, same wheel assembly, same motor, same in every respect except that the van body is timber and steel instead of plywood. The weight of the truck totals 10,400 lb. That 3,400 lb. excess is an all-important factor. It means more than a ton-and-a-half of extra weight must be carried to the exclusion of paying freight. It slows down the truck, especially on the hills, increases gas and oil costs and other maintenance expenses.

There is another interesting little matter in this connection. The license structure for taxes in most states is rather complicated. For instance, a license for

a truck, with load, weighing under 20,000 lb. may be about \$50. License for a truck over 10 tons, often may be as high as \$150. The figures are purely comparative. The license fee for the heavier truck would be several times that of the lighter vehicle.

Mr. McLean adds another item in favor of his plywood trucks. He lists the original cost of the paneled van as 'appreciably' lower than that of one with a steel and timber body.

There are several years of experience behind his claims for plywood trucks. One carrier, built of plywood in 1929, has a carrying capacity of five tons, or 1,000 cu. ft. The plywood panels have turned in excellent service despite the fact that particular truck was constructed prior to the development of exterior waterproof plywood, bonded with synthetic resin adhesive, similar to Bakelite. Now, of course, only the exterior type is used, usually the 1/4 in. panels. They do not require any second or inside wall, as do bodies built of other materials. No special framework is required. Painting is simple, with a coat of sealer, and two or more coats of aluminum paint.—(Haskell)

What to Write to Servicemen

The Office of War Information offers these pointers for homefolk writing to soldiers, sailors, and marines. The pointers are based on suggestions gathered in a survey among servicemen at home and overseas. We publish them for their human interest value and timeliness.

Tell Him:

1. How the family is doing everything possible to help in the war.
2. How anxious the family is for the boy's return.
3. How well and busy the family is. Give details.
4. How the family is getting along financially.
5. What's doing in the community: news about girls (single) he knows, doings of friends, who's marrying whom, exploits of the

home team and other sports events, social doings, effects of the war on the home town. Reminisce a little about past events and places the boy used to visit. Enclose clippings from the home-town paper.

Don't Tell Him:

1. Your troubles. He has troubles of his own.
2. Your complaints. He can't do anything about them.
3. About things you are deprived of. He can't supply them.
4. Doleful predictions about the future. He's fighting for that future—now.
5. Unnecessary details about financial troubles. If there are things he should know about family finances, and he is in a position to do something about the situation, tell him. But don't string it out.

Going Out of Business

Because of inability to renew their lease officers of the Columbus Warehouses, Inc., 228 W. Broad St., Columbus, O., have decided to liquidate the business.

"Being unable to renew the lease on the building that we have occupied as a

warehouse for the past 15 years," A. P. McNeal, manager, told *DandW*, "we have decided, rather than try to find a new location, to quit business."

Mr. McNeal in the future will be associated with the Merchandise Warehouse Co., 370 W. Broad St., Columbus.

Three Aviation Concerns In New Set-up

A new organizational set-up, by which three old aviation concerns are united to coordinate the parts they are playing in the war effort, has been announced by Earl Herring, president and general manager, Airplane Manufacturing & Supply Corp., the managing company which now directs the group.

The managing concern will operate under the trade name of "AMSCO" and will direct the activities of the oldest names in the aircraft service industry now operating in 13 plants located in the San Fernando Valley north of Los Angeles and in San Diego and Oakland, Cal. Names and addresses of associate companies will not be changed.

Of the three producing concerns, Pacific Airmotive (PAC) has been engaged in airplane end engine overhaul work since 1927, the Manufacturing Division of Airplane Manufacturing & Supply Corporation manufactures aircraft tools and testing equipment, and Airplane Parts & Supplies has distributed new and reconditioned aircraft parts for the past ten years.

Other officers of AMSCO are Edward O. Locher, assistant general manager and secretary-treasurer; Ralph B. Lacey, vice president; and K. R. Jamison, vice president in charge of sales.

SHARON, PA.

SHARON COAL & ICE CO.

230 W. Budd St., Sharon, Pa.

Cold Storage—Merchandise—Household Goods

2 Warehouses with private sidings on Erie & P. RR's reciprocal switching. Loans on Stored Commodities. Cold Storage for furs—Cold storage lockers—Quick Freeze space.

UNIONTOWN, PA.

H. D. RYAN—L. G. HOWARD, Proprietors

KEYSTONE TRANSFER CO.

CORNER BEESON BLVD. & PENN ST.

HOUSEHOLD GOODS PACKED, SHIPPED, STORED
LONG DISTANCE MOVING

Private Siding B. & O. R.R.

WILKES-BARRE, PA.

WILKES-BARRE STORAGE CO.

General Storage and Distribution

Prompt and Efficient Service

12 Car Track Located on Lehigh Valley RR. Switches
Storage-in-Transit and Pool Cars

19 New Bennett St.

Wilkes-Barre, Pa.

WILLIAMSPORT, PA.

WILLIAMSPORT STORAGE CO.

FIREPROOF BUILDING—416 FRANKLIN STREET

P. R. R. SID'NG

MERCHANDISE STORAGE and DISTRIBUTION

HOUSEHOLD GOODS—DRAYAGE

IDEAL DISTRIBUTING POINT FOR CENTRAL PENNSYLVANIA

SAN JUAN, P. R.

MEMBER AMERICAN WAREHOUSEMEN'S ASSOCIATION

ALMACENES MARITIMOS

(MARITIME WAREHOUSES)

11 WAREHOUSES IN SAN JUAN, P. R.

Complete warehouse and distribution service

Warehouses located adjacent to Steamship Piers

Lowest rate of insurance

SERVICE—SAFETY—GUARANTEE

ALMACENES MARITIMOS

MANUEL G. CASSERES, Managing Owner.

BOX 2770

SAN JUAN, P. R.

PROVIDENCE, R. I.

CADY MOVING & STORAGE CO.

80-90 Dudley St.

FIREPROOF WAREHOUSE

Storage, Moving, Shipping

Fleet of Long Distance Moving Vans

Member National Furniture Warehousemen's Assn.

Agent for Allied Van Lines, Inc.

PROVIDENCE, R. I.

Providence Warehouses, Inc.

General Offices: 50 ALEPPO ST.

Customs Bonded

Specialists in bulk storage of all kinds—

Cotton, Wool, Hemp, Rubber

Over 400,000 square feet of sprinkler equipped space.

PROVIDENCE, R. I.

Terminal Warehouse Company of R. I., Inc.

336 ALLENS AVE., PROVIDENCE 1

Storage all kinds of General Merchandise, Pool Car

Distribution. Lowest Insurance.

Trackage facilities 50 cars. Dockage facilities on

deep water.

Shipping directions South Providence, R. I.

CHARLESTON, S. C.

C. B. JENKINS, JR., Pres. L. E. McKAY, Mgr.

Merchandise Storage and Pool Car Distribution

Modern Concrete Warehouse. 100,000 Square Feet of Storage Space. Private Trucks Connecting with All Railroad and Steamship Lines. Motor Truck Service. Low Insurance Rates.

Charleston Warehouse and Forwarding Corp.

16 HASSELL ST., CHARLESTON, S. C. Telephone 2-2918
Member of the American Chain of Warehouses, Inc. American Warehousemen's Association
New York Office: 250 Park Ave., Telephone Plaza 3-1234

COLUMBIA, S. C.

Distribution Center of South Carolina



CAROLINA BONDED STORAGE CO.

Est. 1928

General merchandise and household goods storage.

Pool Car Distribution. Private rail sidings. Sprinkler equipped warehouse.



GREENVILLE, S. C.

"The Heart of the Piedmont"

TEXTILE WAREHOUSE CO.

Est. 1928

511-13-15 Rhett St.

GENERAL MERCHANDISE—H.H.C. STORAGE

Pool Car Distribution—Motor Truck Service

Low Insurance Rate Private Siding



SIOUX FALLS, S. D.

WILSON STORAGE AND TRANSFER CO.

110 NO. REED ST.

Investment \$350,000
State Bonded
80,000 Sq. Ft. Floor Space

Fireproof, sprinklered building with private siding on the C&N.V.
Labeling and Sorting. Distribution of Pool Cars. Household Goods Transferred. Refrigerated Truck Service.
Owners and operators of Wilson Forwarding Co.
Members of NFWA—MinnNWA—AWAM
Agent for AVL

KNOXVILLE, TENN.

FIREPROOF STORAGE & VAN COMPANY, Inc.

201-211 Randolph St., Knoxville, Tennessee
135,000 square feet on Southern Railway tracks.
Equipped with Automatic Sprinkler

Insurance at 12c. per \$100.00 per annum.
Household goods shipments solicited. Prompt remittances made.
Pool Cars distributed.
MEMBERS American Warehousemen's Ass'n
PROMPT AND EFFICIENT SERVICE

MEMPHIS, TENN.

S. S. DENT, Owner

General Warehouse Co.

421 So. Main St.

"Good housekeeping, accurate records, Personal Service"

Located in the center of the Jobbing & Wholesale District

Sprinklered Private R. R. siding Low Insurance Perfect service



MEMPHIS, TENN.

Benton T. Grills, Sec'y. & Mgr.

NICKEY WAREHOUSES, INC.

"Memphis Most Modern Warehouses"

285-305 West Trigg Ave.

Merchandise Storage & Pool Car Distribution
Local Delivery Service

A.D.T. Burglar and Sprinkler Supervisory Service. Illinois Central, Frisco & Mo. Pac. Private rail siding 9 car spot.

MEMPHIS, TENN.

W. H. DEARING, General Manager

POSTON WAREHOUSES

ESTABLISHED 1894

671 to 679 South Main St., Memphis 2

Insurance Rate \$1.25 per \$1,000 per Annum Distribution a Specialty
Merchandise storage, dependable service, free switching. Local cartage delivery, Illinois Central and Cotton Belt Railway tracks. Automatic sprinkler. A.D.T. watchmen.

MEMPHIS, TENN.

H. K. HOUSTON, Pres. P. D. HOUSTON, V.P.

UNITED WAREHOUSE & TERMINAL CORP.

Warehouse No. 1 Warehouse No. 2
137 E. Calhoun Ave. 138-40 St. Paul Ave.

Memphis, Tennessee

Storage (Mds.)—Pool Car Distribution—Local delivery service—Office Space. In the heart of the wholesale district and convenient to Rail, Truck and express terminals. Eight car railroad siding—(N.C.&S.T.L. and L.&N.)—Railroad switching. Represented by Distribution Service, Inc. Member of A.W.A. and N.W.A.

NASHVILLE, TENN.

124 FIRST AVE. N.

BOND, CHADWELL CO.

MERCHANDISE WAREHOUSE. RAIL, TRUCK AND RIVER TERMINAL.



NASHVILLE, TENN.

521 Eighth Ave., So.

Central Van & Storage Co.

MERCANTILE AND HOUSEHOLD STORAGE

WAREHOUSE STOCK and POOL CAR DISTRIBUTION

Automatic Sprinkler System—Centrally Located

NASHVILLE, TENN.

Nashville Warehousing Co.

P.O. Box 555

GENERAL STORAGE

POOL CAR DISTRIBUTION

FREE SWITCHING—CITY TRUCKING

NASHVILLE, TENN.

ESTABLISHED 1886

THE PRICE-BASS CO.

194-204 Hermitage Ave., Nashville 2

STORAGE

Automatic Sprinklered—Spot Stock and Pool Car Distribution—Private Siding



BEAUMONT, TEXAS

TEXAS STORAGE COMPANY

656 Neches St. Beaumont, Texas



Merchandise and Household Goods Warehouse, Concrete Construction 30,000 Sq. Ft. Distribution of Pool Cars Transfer Household Goods

Agent for A.V.L. Member of N.F.W.A.—S.W.A.T.A.

CORPUS CHRISTI, TEXAS

CORPUS CHRISTI WAREHOUSE AND STORAGE COMPANY

Located AT PORT SITE adjacent to docks NAVIGATION DISTRICT NO. 1

Storage Distribution Drayage

96,400 Sq. Ft. Sprinklered Low Insurance Rates
Member: Southwest Warehouse and Transfermen's Ass'n

CORPUS CHRISTI, TEXAS

Robinson Warehouse & Storage Co.

General Offices: 1500 N. Broadway, Corpus Christi

Specialists in

General Merchandise Storage—Pool Car Distribution

Public Bonded Warehouses at Alice, Corpus Christi, Harlingen and Victoria. . . Daily and overnight common carrier Motor Freight Service to Houston, San Antonio, Austin, Laredo and Rio Grande Valley, serving all intermediate points. Expert Handling: Inquiries invited.

TEXAS

DALLAS, TEXAS

ESTABLISHED 1875

DALLAS TRANSFER AND TERMINAL WAREHOUSE CO.

Second Unit Santa Fe
Building, Dallas 2, Texas

Modern Fireproof
Construction—
Office, Display,
Manufacturers,
and
Warehouse Space



Operators of the
Lone Star Package Car
Company (Dallas and Fort
Worth Divisions)
H. & N. T. Motor Freight Line
Agents for Allied Van Lines, Inc.

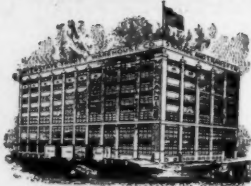
A.W.A., N.P.W.A., American Chain
of Warehouses
Southwest Warehouse & Transfer-
men's Assn., Rotary Club



DALLAS, TEXAS

INTERSTATE-TRINITY WAREHOUSE COMPANY

301 North Market St., Dallas 2



Merchandise Storage and
Distribution
Household Goods Storage,
Moving & Packing
Long Distance Hauling

R. E. ABERNATHY, Pres.
J. H. CHILES, Vice-Pres.

Represented by

NEW YORK
11 WEST 42ND ST. PENN. 6-0967

ALLIED DISTRIBUTION INC.

CHICAGO

1525 NEWBERRY AVE. MON. 5531

DALLAS, TEXAS

In Dallas It's Binyon-O'Keefe

MERCHANDISE STORAGE—POOL CAR DISTRIBUTION
Our modern Centrally located fireproof warehouse is completely equipped to serve
you with over 75000 square feet of merchandise & household goods storage space.
MOVING—STORAGE—PACKING—SHIPPING



Since
1875

BINYON-O'KEEFE
Fireproof
Storage Co.

Since
1875



2201 LAWS ST., DALLAS 1

Associated with Distribution Service, Inc.

DALLAS, TEXAS

SPECIALIZING

MERCHANDISE STORAGE
POOL-CAR DISTRIBUTION

SERVING THE GREAT
SOUTHWEST AREA

EVERY ACCOUNT IS
PERSONALLY SUPERVISED
BY THE MANAGEMENT



KOON-McNATT STORAGE & TRANSFER CO.
1100 CADIZ ST.

CONTRACT OPERATORS FOR ALL RAIL
LINES AND UNIVERSAL CARLOADING &
DISTRIBUTING COMPANY

Over 10,000,000 Pounds of Freight Handled Monthly
for Dallas Shippers



EL PASO, TEXAS

"Bankers of Merchandise"
"Service With Security"

International Warehouse Co., Inc.

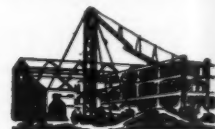
1601 Magoffin Ave.

El Paso, Texas



Lowest Content Insurance Rate
Fireproof Storage of Household Goods, Autos
& Merchandise. State and Customs Bonded.
Private Trackage—T. & P. and So. Pac. Rys.
Pool Car Distribution—Motor Truck Service.
Incorporated in 1920
Members—N.W.A.—S.W.T.A.—Agent for Allied
Van Lines, Inc.

Factories on the Move...



LITTLE ROCK, ARK.—Southwest
Handle & Mfg. Co., Benton, Ark., tool
handles and other turned wood products,
has authorized immediate erection of new
branch plant at foot of 14th St., here,
where site was recently acquired. It will
consist of two 1-story buildings, reported
to cost close to \$45,000, with equipment.
Project will have a priority rating.

LOS ANGELES, CAL.—Richfield Oil
Co., 555 S. Flower St., has approved
plans for new refinery on Figueroa St.,
in Watson district, near Wilmington,
comprising large group of 1- and multi-
story structures for high-octane gasoline
production for aviation service. Entire
project will cost close to \$13,000,000.
Work is scheduled to proceed at once.
Project has a priority rating.

BELMONT, IA.—General Mills, Inc.,
Chamber of Commerce Bldg., Minneap-
olis, Minn., Vegetable Oil & Protein Di-
vision, has purchased beet sugar mill of
American Crystal Sugar Co., at Belmont,
near Mason City, consisting of a number
of 1- and multi-story buildings, on 250-
acre tract of land. Property will be re-
modeled and converted for a new soybean
processing mill, with installation of ma-
chinery to handle about 2,500,000 bu. of

soybeans annually. Cost reported over
\$350,000. Project will have a priority
rating. Whitney H. Eastman is vice-
president of division noted.

WATERLOO, IA.—Waterloo Valve
Spring Compressor Co., 1400-10 E. 4th
St., compressor tools for valve springs,
etc., has purchased local property, 125 x
500 ft., on Broadway, and will use as site
for new 1-story plant as a postwar de-
velopment, work to begin as soon as ma-
terials are available. Cost estimated
about \$100,000. Nicholas Sulentic is
president and treasurer.

BOSTON, MASS.—Arrow Armatures
Co., 1375 Boylston St., armature winding
and motor repairs, etc., has taken over
a 1-story industrial building at 15 Ford-
ham St., Allston district, and will re-
model and equip for new machine shop.

CLINTON, MASS.—Empire Furni-
ture Mfg. Co., Boston, has leased two
floors in former mill of Bigelow-Sanford
Carpet Co., here, now owned by Clinton
Industries, Inc., and will occupy for
branch plant. Considerable equipment
will be removed from another location
for installation, providing for working
force of about 100 persons.

LANSING, MICH.—Motor Wheel
Corp., E. Saginaw St., automobile wheels,
metal stampings, etc., has purchased one
of buildings comprising former local
works of Auto Body Co., including ad-
joining land, for a reported consideration
of about \$100,000. Structure will be im-
proved and equipped for service depart-
ment, with part of space to be used for
storage and distribution. It will be
known as Plant No. 4 of purchasing com-
pany. Work will be carried out at once.

MINNEAPOLIS, MINN.—Champion
Animal Food Co., 652 Stimson Blvd.,
Northwest Terminal, prepared animal
foods, has acquired two 1-story buildings
in vicinity of present factory, and will
remodel and expand for early occupancy.
Equipment will be installed for consider-
able increase in present output.

DUENWEG, MO.—Missouri Chemical
Co., Duenweg (Jasper County), recently
organized, William R. Thurston, general
manager, has approved plans for new
1-story plant, about 80 x 250 ft., on local
site, with several smaller adjoining build-
ings, for manufacture of commercial fer-
tilizer. Cost reported over 80,000, with
equipment. Project will have a priority
rating. General erection contract has

been let to Jones Brothers Construction Co., Carthage, Mo.

ST. LOUIS, MO.—General Elevator Engineering Co., 2329 Pine St., elevator equipment, parts, etc., has acquired a 1-story industrial building at 2010 S. 8th St., and will remodel and equip for expansion.

BILLINGS, MONT.—Pacific Car & Foundry Co., Factory St., Renton, Wash., has leased the Fair Grounds and buildings here, comprising several 1-story buildings, and will remodel and equip for new branch plant for production of large motor truck and tractors for Government, including parts manufacture and assembling. Entire program reported to cost in excess of \$150,000.

LINCOLN, NEB.—Goodyear Tire & Rubber Co., 1144 E. Market St., Akron, O., has purchased former motor truck plant of Patriot Truck Co., here, comprising several 1-story buildings, to be remodeled and equipped for new branch works for production of special rubber and fabric self-sealing fuel tanks for military airplanes. Project will have a priority rating and is reported to cost about \$500,000.

CRANFORD, N. J.—Epplesheimer & Co., 34 Hulbert St., New York, N. Y., metal stampings, ice cream and candy moulds, etc., have leased a 1-story factory at 24 South Ave. W., Cranford, for a term of years, and will improve and equip for main plant.

EAST ORANGE, N. J.—Eastern Aircraft Division, General Motors Corp., 45 LaFrance Ave., Bloomfield, N. J., airplane parts, has leased 1-story industrial building at 181 Springdale Ave., here, formerly used by Rice Baking Co., and will improve and equip for expansion, primarily for storage and distribution.

ELIZABETH, N. J.—H. A. Wilson Co., 105 Chestnut St., Newark, N. J., refining and processing plant for platinum production, has leased a floor in Waverly Terminal Bldg., 829-63 Newark Ave., here, totaling 10,000 sq. ft. of floor space, and will equip for expansion. H. A. Wilson is president.

MORRISTOWN, N. J.—Allied Chemical & Dye Corp., 61 Broadway, New York, N. Y., has approved plans for immediate erection of 1-story laboratory building here, where site recently was purchased, estimated to cost close to \$40,000, with equipment. It is understood that project has a priority rating.

NEWARK, N. J.—Greylock Suits, 88 University Pl., New York, N. Y., have leased space in industrial building at 405 High St., here, totaling about 10,000 sq. ft. of floor area, and will equip for new factory.

NEWARK, N. J.—Industrial Engraving & Machine Co., 376 Broad St., engraving equipment, has purchased 6-story factory at 55-57 Lafayette St., and for present will occupy a floor building for expansion. It is understood that addi-

tional space in structure will be equipped at later date.

NEWARK, N. J.—Jay Syrup Co., 58 Adams St., has leased 1-story and basement factory at 13-15 Malvern St., and will make alterations and improvements for early occupancy. Proposed to remove present plant to new location and increase capacity.

PATERSON, N. J.—International Braid Co., 72 Leonard St., New York, N. Y., has purchased a factory at 245 Crooks Ave., here, formerly owned by U. S. Varnished Tile Co., totaling about 25,000 sq. ft. of floor space, and will improve and equip for new branch mill.

RUTHERFORD, N. J.—Vorac Co., 310-12 Adams St., lacquers, etc., has purchased 1-story factory on local site at 147 Meadow Rd., and will improve and equip for expansion. Company also has acquired tract of about 1/2-acre of land, and proposes to build 1-story addition as a postwar development. R. J. Anderson is president.

BROOKLYN, N. Y.—Bridge Mechanical Laboratories, Inc., 100 S. 6th St., has plans for new 1-story building at 75-77 S. 5th St., to be equipped as a machine shop. Proposed to begin work soon.

BROOKLYN, N. Y.—Tedlee Chemical Corp., 260 Broadway, insecticides, germicides, etc., has purchased 3-story factory at 111-17 Dobbin St., with 1-story connecting building, totaling in all about 20,000 sq. ft. of floor space, and will improve and equip for plant.

FORT WORTH, TEXAS

In Fort Worth It's Binyon-O'Keefe

MERCHANDISE STORAGE—POOL CAR DISTRIBUTION
Our modern Centrally located fireproof warehouse is completely equipped to serve you with over 90,000 square feet of merchandise & household storage space.
MOVING—STORAGE—PACKING—SHIPPING



Since 1875

BINYON-O'KEEFE
Fireproof Storage Co.
901 Commerce St., Fort Worth 1

Since 1875



Associated with Distribution Service, Inc.

FORT WORTH, TEXAS

Agents—ALLIED VAN LINES, INC.

Storage, Cartage, Pool Car Distribution



O. K. Warehouse Co., Inc.

255 W. 15th St., Fort Worth 1, Tex.

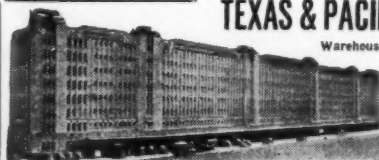


FORT WORTH, TEX.

Member—SWA-AWA

TEXAS & PACIFIC TERMINAL WAREHOUSE CO.

Warehouses—DALLAS—FT. WORTH
Merchandise Storage
Pool Car Distribution
Office, Display and Warehouse Space
Branch Office Facilities
Ample room for Automobiles and Truck parking
LOW INSURANCE RATES



HOUSTON, TEXAS

BINYON-STRICKLAND

WAREHOUSES, INC.

Merchandise Storage — Pool Car Distribution
Centrally Located — Lowest Insurance Rate
Private Siding Southern Pacific Ry. Co.

Goliad & Morin Sts.

Houston

HOUSTON, TEXAS

FEDERAL WAREHOUSE COMPANY

915 N. San Jacinto St. Houston 2, Texas

General Merchandise Storage

Pool Car Service

Fireproof Sprinklered Warehouses

Located in the heart of the wholesale district

HOUSTON, TEXAS

Better Warehousing in HOUSTON

We operate a modern low insurance rate warehouse in the center of the wholesale, jobber, rail and truck terminal district. Most conveniently located for interior jobbers' trucks; well trained personnel; cooler space.

HOUSTON CENTRAL WAREHOUSE CO.
Commerce and San Jacinto

Houston, Texas

Represented by
NEW YORK ALLIED DISTRIBUTION INC. CHICAGO
11 WEST 42ND ST. PH. 6-0046 1525 NEWBERRY AVE. MO. 348

HOUSTON, TEXAS

Houston Terminal Warehouse & Cold Storage Company

701 No. SAN JACINTO ST., HOUSTON 2

General Storage Cold Storage U. S. Custom Bonded

A. D. T. Service Pool Car Distribution

Office Space Display Space Parking Space

Lowest Insurance Rate

New York Representative
Phone PLaza 3-1235

Chicago Representative
Phone Harrison 1496

HOUSTON, TEXAS

AT HOUSTON

Receiving also Wharfingers offering
Weighing complete Shipside Services with
Sampling berthing space for eight steamers.
Warehousing
Forwarding

HOUSTON WHARF COMPANY

(Formerly Long Reach Shipside Terminal)

OWNED AND OPERATED BY GULF ATLANTIC WAREHOUSE CO.
P. O. Box 2588 Houston 1, Texas

TEXAS

HOUSTON, TEXAS

PATRICK TRANSFER & STORAGE CO.

Merchandise and Household Goods Storage
Pool Car Distribution



Sprinklered—A.D.T. Watchmen
Shipside and Uptown Warehouses
Operators—Houston Division
Lone Star Package Car Co.



1117 Vine St. Agents for Allied Van Lines, Inc.

Members N.F.W.A.
State and Local Assn.

HOUSTON, TEXAS

SOUTHERN WAREHOUSE CORPORATION

Bonded Warehouse
General Merchandise Storage
Pool Car Service
Sprinklered
Centrally Located
A.D.T. Supervised Ser.
Low Insurance Rate
Private Siding on Southern
Pacific Ry. Co.

4410 Clinton Drive

Houston, Texas

HOUSTON, TEXAS

MERCHANDISE DISTRIBUTION

COMMERCIAL STORAGE—
OFFICE SPACE — PARKING SPACE

T. P. C. STORAGE & TRANSFER CO., INC.

2301 Commerce Ave.

HOUSTON, TEXAS

W. E. FAIN, Owner and Manager
Established 1901

TEXAS WAREHOUSE COMPANY

Forty-two Years
Under Same Continuous Management

MERCHANDISE EXCLUSIVELY

Pool Car Distribution
A.D.T. Supervised Service
Sprinklered Throughout

HOUSTON, TEXAS

Agent for Allied Van Lines, Inc.

UNION Transfer & Storage Co.

1113 Vine St. P.O. Box 305
Forwarding and Distributing

MERCHANDISE STORAGE

Warehouses Sprinklered Throughout.
Supervised by A.D.T. Service.

SERVICE THAT COUNTS



HOUSTON, TEXAS

UNIVERSAL TERMINAL WAREHOUSE CO.

1006 WASHINGTON AVE., HOUSTON 1
Merchandise Storage—Pool Car Distribution
Sprinklered—A.D.T. Watchmen
— U. S. Customs Bonded —
— Office Space —

New York Representatives:
DISTRIBUTION SERVICE, INC.
2 Broadway
Members A.W.A. and State and Local Associations.

Chicago Representatives:
DISTRIBUTION SERVICE, INC.
219 E. North Water St.
Members N. F. W. A.
State and Local Assn.

HOUSTON, TEXAS

BENJ. S. HURWITZ, Pres.

WESTHEIMER

Transfer and Storage Co., Inc.

OVER 50 YEARS IN HOUSTON

Fireproof Warehouses
Merchandise & Household Goods Storage—Pool Car Distribution—
Lift Van Service—20 car lengths of truckage.
Members N. F. W. A.
State and Local Assn.



Agent for Allied Van Lines, Inc.

SAN ANTONIO, TEXAS

MERCHANTS

Merchandise
TRANSFER & STORAGE CO.
Household Goods

Complete Storage and Distribution Service

over 50 years of satisfactory service
Member of A.W.A.—N.F.W.A.—S.W.A.

LONG ISLAND CITY, N. Y.—DeJur-Amsco Corp., Shelton, Conn., electrical indicating instruments, has purchased 2-story factory, 180 x 240 ft., occupying block front on Northern Blvd., 45th to 46th. Sts., at one time occupied by Packard Motor Car Co., and will occupy for new plant. Machinery and facilities will be provided for about 200 persons.

NEW YORK, N. Y.—North Eastern Iron Works, 1759 West Farms Rd., Bronx, structural and ornamental iron products, has purchased 1-story industrial building at 1777 West Farms Rd., on site, 100 x 250 ft., and will improve and equip for expansion. Company recently acquired adjoining building at 1775 West Farms Rd.

NEW YORK, N. Y.—K. Stenzel & Sons, 34 W. Houston St., optical goods, have leased top floor in 12-story industrial building at 164-66 Duane St., extending to 21-29 Hudson St., and will occupy for plant, removing present works to new location and increasing capacity.

BOILING SPRINGS, N. C.—Pearl Mills, cotton yarns, have acquired 1-story building on local site, and will improve and equip for expansion. About 2100 spindles and auxiliary equipment will be installed.

GREENSBORO, N. C.—Blue Bell, Inc., Greensboro, overalls and other working garments, has leased local Lenoir Cotton Mill for a period of years, and will improve and equip for new branch factory.

NORWOOD, N. C.—Collins & Aikman Co., 200 Madison Ave., New York, N. Y., upholstery fabrics, etc., has purchased mill of Norwood Mfg. Co., here, and will improve and convert for new branch plant. Company is now operating a branch mill at Roxboro, N. C.

BEDFORD, O.—Proposed new plant of Ben Venue Laboratories, Inc., Park Bldg., Pittsburgh, Pa., in Ohio, recently referred to in these columns, will be located on Northfield Rd., here, where tract of land has been acquired. It will consist of main 1- and 2-story building, about 65 x 170 ft., with boiler house and auxiliary structures, and will be equipped for production of "Penicillin," new mold-made bacteria-killing drug, with output to be used by Government. Cost estimated about \$340,000, with equipment. Financing in that amount will be provided by Defense Plant Corp., Washington, D. C., Federal agency. General erection contract has been awarded to A. M. Higley Co., 2036 E. 22nd St., Cleveland, O.

CLEVELAND, O.—Brush Development Co., 3311 Perkins Ave., testing and recording instruments, has acquired building at 1052 E. Superior Ave., formerly used by Superior Transfer Co., consisting of a large multi-story structure. It will be remodeled and improved for new plant for production of instruments for naval service. Cost reported close to \$250,000, with machinery. Navy Department, Washington, D. C., is interested in project, which will have a priority rating.

CLEVELAND, O.—Lewis Machine Co., 3441 E. 76th St., has acquired a 1-story building, about 80 x 160 ft., at 1961 E. 65th St., and will remodel and equip for electrical heat-treating service. Application has been made to city zoning board for permission to carry out work. Marvin W. Lewis is president.

MIDDLEFIELD, O.—Geauga Die & Mold Co., 968 E. 69th Pl., affiliated with Columbia Rubber Mold Co., same address, has plans under way for new branch plant here, to be 1-story, about 75 x 120 ft., reported to cost over \$60,000, with machinery. It is understood that project will secure a priority rating. Frank Hiebeck is president of first noted company.

ZANESVILLE, O.—Lempco Products, Inc., 5490 Dunham Rd., Cleveland, O., lathes, grinders and other machine tools, is reported planning establishment of new branch plant here, where property is now being selected. It is said that proposed plant will total about 35,000 sq. ft. of floor space.

COLUMBIA CITY, ORE.—Columbia Shipbuilding & Drydock Co., Lewis Bldg., Portland, Ore., has plans maturing for new shipbuilding and repair plant on Columbia River, vicinity of Columbia City, where site has been secured. It will consist of 3 shipways, docks, shops, boiler house and other structures, and is reported to cost in excess of \$1,000,000. Work is scheduled to begin soon. Project will have a priority rating. Alexander Mechlin is general manager and engineer.

SAN ANTONIO, TEXAS

Muegge-Jenull Warehouse Co.

BONDED FIREPROOF

**POOL CAR DISTRIBUTORS
STORAGE AND DRAYAGE**

Dependable Service Since 1913

SAN ANTONIO, TEXAS

Agent for Allied Van Lines, Inc.

Scobey Fireproof Storage Co.

311-339 North Medina St., San Antonio 7

HOUSEHOLD - MERCHANDISE - COLD STORAGE -

CARTAGE DISTRIBUTION

INSURANCE RATE - - - 10c

Members of 4 Leading Associations



SAN ANTONIO, TEXAS

MEMBER

SOUTHERN TRANSFER & STORAGE CO.

P. O. BOX 4097, STA. A, SAN ANTONIO 7

Specialists in Merchandise Distribution

FIREPROOF CONSTRUCTION

BONDED STORAGE

Represented by **ALLIED DISTRIBUTION INC.** CHICAGO
11 WEST 42ND ST. PHIL. 6-0077 1323 NEWBURY AVE. WOLLSB.



NORFOLK, VA.

MEMBER



HOUSEHOLD AUTOMOBILE STORAGE

NEW-BELL STORAGE CORPORATION

NORFOLK, VIRGINIA

MODERN SPRINKLER EQUIPPED WAREHOUSE

50,000 SQUARE FEET PRIVATE RAIL SIDING

Lowest Insurance Rate in Norfolk. Pool Car Distribution

WE SPECIALIZE IN MERCHANDISE STORAGE

AND DISTRIBUTION

AGENTS AERD MAYFLOWER TRANSIT COMPANY

Member M.W.A. & S.W.A.

TYLER, TEXAS

Tyler Warehouse and Storage Company

Bonded under the Laws of Texas

General Storage and Distribution from the Center of East Texas. Specializing in Pool Cars Merchandise.

OGDEN, UTAH

MEMBER OF A.W.A.

WESTERN GATEWAY STORAGE CO.

GENERAL WAREHOUSING

POOL CAR DISTRIBUTION

MERCHANDISE AND COLD STORAGE

SALT LAKE CITY, UTAH

CENTRAL WAREHOUSE

Fireproof Sprinklered

Insurance rate 18c. Merchandise Storage. Pool Car Distribution.

Office Facilities.

Member A. W. A.



SALT LAKE CITY, UTAH

Merchandise Storage and Distribution

Over 1,000,000 cubic feet reinforced concrete Sprinklered Space

Insurance Rate 11 Cents

CORNWALL WAREHOUSE CO.

Salt Lake City, Utah

Represented by

DISTRIBUTION SERVICE, INC.

New York—Chicago—San Francisco

SALT LAKE CITY, UTAH

Storage—Pool Car Distribution

KEYSER MOVING AND STORAGE CO.

328 West 2nd South, Salt Lake City 1 Est. 1910

72,000 sq. ft. space. Reinforced concrete and brick. Dignified, accessible, and central location. U.P. spur with free switching from or to other lines. P-U&D service rail or truck. Systematic delivery service twice daily. 90% Co-ins. rate 19¢ per \$100.00. A.D.T. automatic burglar and fire protection. Office and desk space available.

Member AWA—UWL—UWA—AWI



SALT LAKE CITY, UTAH

"This is the Place"

FOR BETTER SERVICE

SECURITY STORAGE & COMMISSION CO

230 S. 4TH WEST ST., SALT LAKE CITY 1

Over 37 Years' Experience

Merchandise Warehousing - Distribution
Sprinklered Building - Complete Facilities
Lowest Insurance Cost - A.D.T. Watchman Service
Office Accommodations - Display Space

Represented by American Chain of Warehouses, Inc.

New York Chicago

250 Park Ave. 53 W. Jackson Blvd.

MEMBER:

A.W.A.—U.W.A.



NORFOLK, VA.

Serving—Va. Beach, Ft. Monroe, Newport News, Williamsburg and Tidewater Virginia.

Security Storage and Van Corp.

530 FRONT STREET

Norfolk's Finest Fireproof Furniture Warehouse

Motor Van & Lift Van Service

Collections — Distribution

Members—NAT. F.W.A.—ALLIED VAN LINES

NORFOLK, VA.

Established 1892

SOUTHGATE

STORAGE COMPANY, Inc.

239 Tazewell St., Norfolk 10

For economical storage and distribution you will want to know more about our individualized services. Our fireproof warehouses are in the Southgate Terminal, on the waterfront and in the center of Norfolk's wholesale district. Served by all rail, water and motor lines.



MEMBER:
A.C.W.
A.W.A.
S.W.A.
U.S.C. of C.

Write for Booklet—"7 POINT DISTRIBUTION"

RICHMOND, VA.

64 Years of Uninterrupted and Expert Service

BROOKS TRANSFER AND STORAGE CO., Inc.

1224 W. Broad Street, Richmond 3, Va.

Three Fireproof Storage Warehouses—510,000 Cubic Feet Floor Space—Automatic Sprinkler System—Low Insurance Rates—Careful Attention to Storage—Packing and Shipping of Household Goods—Private Railroad Siding—Pool Car Distribution—Motor Van Service to All States—Freight Truck Line.

Member of N. F. W. A.—A. V. L.—A. T. A.

RICHMOND, VA.

STORAGE

HOUSEHOLD

GOODS

OBJECTS OF ART

FURS - RUGS

VALUABLES

**THE W. FRED. RICHARDSON
Security Storage Corporation**

Main at Belvidere, Richmond 20

PACKING FOR SHIPMENT

Local and Long Distance Movements

ESTABLISHED 1897

Agent for Allied Van Lines, Inc.

Wine . . .

(Continued from page 7)

vision managers to the New York office, where, after approval, they are forwarded to Guasti to be shipped direct to the distributors in each city or state. Since the whole business has been allocated from New York in the first place on the probable seasonal production, the orders are no great surprise to the superintendent at Guasti.

"From Guasti, the wine is shipped, 1,500 cases to a carload, each order direct to a distributor. The distributor receives it in the freight yards and loads it on his own trucks, and he himself delivers the wine to the dealers who have orders with him. The same procedure occurs for every city in the United States.

"With respect to space on freight cars," Mr. Fouty said: "The West Coast is an enormous defense area. Shipping from East to West is tremendous. We cannot begin to return the freight to the East that they send us. For this reason, we have found plenty of room for our wine shipments, which are routed all over the United States from our vineyard."

Right now more wine could be sold on order before crushing time than can

possibly be produced. The 5,000 acres are producing the same quantities of wine they have always produced, but the increased demand makes it impossible to take the aged wine from the vats, bottle it, load it on cars out of Guasti fast enough to fill the orders in the four districts. People just have to wait for their wines, as they do for most everything else these days.

Last year the American people drank 114,000,000 gal. of wine, and American wineries, 90 per cent of which are in California, produced only 60,000,000 gal. The year before, 1941, the consumption was 102,000,000 gal.

Because of the war, imports from France have been cut off, which means that in the last two or three years, vintners here have been depleting their old stocks.

The labor at the vineyards has been taken care of, at least for the time being, so that operations can continue smoothly. The little town of Guasti is a small world which is absorbed entirely in grapes and wines. The labor is 60 per cent Mexican. Practically all of the Mexicans have lived here most of their lives. They work in the vineyard, 250 of them, all year round; they have their own little church, which has become part of the San Diego diocese in recent years, and their children form 98 per cent of

the occupants of the Guasti school buildings.

In the past, the labor from the people in the rest of the township has been used for the picking season. But now since most of this labor has been absorbed into defense work, the growers in the entire area have organized and worked out a careful schedule of seasonal crop production, oranges, lemons, grapes, etc., which will guarantee imported labor a year-round work schedule. With this schedule provided, the growers have imported labor through the Mexican government in sufficient quantity to take care of the harvest of all crops. These people arrive with their families, and operate under a supervisor who reports to the Mexican government periodically.

Experts in wine will tell you that it is not a grape vine; it is a grape tree. And they will tell you that these 5,000 acres grow with no irrigation; irrigation spoils the richness of the wines. The production at the Italian Vineyards could be stepped up several tons per acre instead of the three tons now being produced. But water produces dilution of the juice, and does not make for fine flavored wines. On the outside of the wine grape one sees a fine dust, which really isn't dust at all, but yeast which causes the juice to "work" after crush-

RICHMOND, VA.

160,000 Sq. Ft. Space

VIRGINIA BONDED WAREHOUSE CORPORATION
ESTABLISHED 1908 1709 E. CARY ST.
U. S. BONDED & PUBLIC WAREHOUSES
MERCHANDISE STORAGE & DISTRIBUTION
INSURANCE RATES 20¢ PER \$100 PER YEAR
Member A.W.A.
BUILDINGS SPRINKLERED

ROANOKE, VA.



H. L. LAWSON & SON
Finance and Storage
Pool Car Distributors
General Merchandise Storage
421-25 EAST CAMPBELL AVE.
ROANOKE, VIRGINIA

ROANOKE, VA.

ROANOKE PUBLIC WAREHOUSE

Capacity 500 Cars

Private Railroad Siding



Automatic Sprinkler
Accurate Accounting

We make a Specialty of Storage and Pool Car Distribution for Agents, Brokers and General Merchandise Houses.

Member of American Chain of Warehouses

ABERDEEN, WASH.

Established 1916

A. A. STAR TRANSFER CO., Inc.

321 W. STATE ST.
Merchandise & Household Goods Storage



Private siding. Pool car distribution. Consign shipments via any railroad. Open yard storage. Long distance moving.

Member of A.W.A.—May. W.A.



SEATTLE, WASH.

EYRES TRANSFER & WAREHOUSE CO.

A Seattle Institution—54 years of outstanding service

Cartage — Distribution — Storage
Highest financial rating; new fireproof, A.D.T. sprinklered buildings; lowest insurance rate (10.2¢); modern equipment.

"The Shippers' Open Door to Alaska and the Orient"

SEATTLE, WASH.

LET LYON GUARD YOUR GOODS



Carload
Distributors

PORTLAND, Ore. SEATTLE
2311 N. W. Westover Rd. 2609 Dexter Ave.
Walter Hollingsworth, Mgr. Orin McCullough, Mgr.

SEATTLE, WASH.

J. R. GOODFELLOW, Pres.

OLYMPIC WAREHOUSE & COLD STORAGE CO.

MERCHANDISE STORAGE & DISTRIBUTION

1203 Western Avenue Seattle, Wash.

Cold Storage — Dry Storage — Rentals — Pool Car Distribution — Office Rentals
Fireproof, brick const.; Sprinkler system; Insurance rate: 12.5¢. Siding connects with all rail lines.

Bonded U. S. Customs; State License No. 2.

Member of A.W.A. (C.S.) Wash. State Warehouse Assn.

SEATTLE, WASH.

Lloyd X. Coder, Pres.-Mgr.

Est. 1919

SYSTEM Transfer & Storage Co.

2601-11 Second Avenue, Seattle 1

Warehousemen & Distributors of
General Merchandise and Household Goods
Office and Desk Space—Low Insurance Rates
Member—A.W.A.—W.S.W.A.—N.F.W.A.—S.T.O.A.

SEATTLE, WASH.

TAYLOR-EDWARDS
Warehouse & Transfer Co., Inc.

Free switching service—Low insurance rates—A.D.T. Service,
Associated with leading warehouses through
DISTRIBUTION SERVICE, INC.
New York Chicago San Francisco
Members of—American Warehousemen's Assn.; Washington State
Warehousemen's Assn.

SEATTLE, WASH.

Post graduates in moving personnel

SEATTLE TERMINALS
UNIVERSITY WAREHOUSE, INC.

1017 EAST 40TH STREET, SEATTLE 5

Exclusive agent for Marlowe vans. Seattle's finest, most modern
warehouse for the handling of household goods and personal
valuables. Located in Seattle's fast-growing University district.
Serving Sand Point Naval Air Base.

R. G. CULBERTSON, President
WM. TELL LAUBE, JR., Sec.-Treasurer

SPOKANE, WASH.

The SPOKANE TRANSFER & STORAGE CO.
308-316 PACIFIC AVE.
THE INLAND EMPIRE'S LARGEST DISTRIBUTORS
MEMBERS: AWA-ACW-WSWA

TACOMA, WASH.

Pacific Storage and Transfer Co.

18th & Broadway, Tacoma 2

Drayage Storage Distribution

Forward Stop in Transit and Pool Cars in Our Care
Located in Center Of Wholesale District
Nearest Distributing Point
(To) Fort Lewis, Camp Murray, McChord Field
Member AWA-ACW-Wash. State Assn.

TACOMA, WASH.

TERMINAL WAREHOUSES, INC.

MDSE. WAREHOUSING and DISTRIBUTION
Concrete and Steel Warehouse located on N.P.R.R.
Tracks. Close to all Railway and Motor Freight
Terminals. Special Lockers for Salesmen's Samples.
Swift and Frequent Service to Fort Lewis, McChord
Field and Bremerton Navy Yard
P. O. BOX 1157 — TACOMA, Wash.

HUNTINGTON, W. VA.

Every facility for you and your patrons'
convenience to secure your share of this
Five Hundred Million Dollar market is
available through

THE W. J. MAIER STORAGE COMPANY

APPLETON, WIS.

Owner, Mrs. E. H. Buchert

Established 1894

BUCHERT TRANSFER LINE

500 North Superior St.

Merchandise and Household Goods Storage
Two Furniture Warehouses
Motor Freight Terminal for
Royal Transit Inc., Pope Bros. R. T. Co.
Wesley Freight Line, Stieffe Freight Line
Chicago Northwestern siding, free switching
Member May.W.A.

APPLETON, WIS.

Owner, Harry H. Long

Est. 1926

HARRY H. LONG MOVING & STORAGE
MERCHANDISE - HOUSEHOLD GOODS - MOTOR FREIGHT

Pool Car Distribution Sales Representation

Brick building equipped for economical storage and
distribution. Reached by C&NW—Soc-CE&SF.

Motor Freight Terminal Members of WisWa—N.F.W.A.

115 So. Walnut St.

ing. All the moisture that goes into
these wine grapes is sucked up from
deep below the desert sands by the roots
of the grape trees.

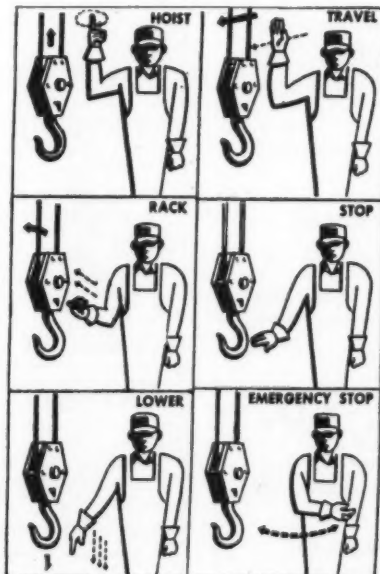
**Winners Announced
In Pa. Contest**

Winners of the three trophies awarded
in the recent Tire Conservation Contest
sponsored jointly by the Pennsylvania
Motor Truck Assn. and ODT were:
Charlton Bros. Transportation Co.,
Philadelphia, for the best program of a
fleet of three to nine trucks; the Shirks
Motor Express Corp., Lancaster, for
best program by a fleet of 10 or more
trucks, and Roy A. Horner, Dutch Hill,
Pa., for best program of an operator of
one or two trucks.

**Dr. Engelhardt Heads
Air Research Group**

Air-Age Education Research was
launched last month at a meeting in New
York of a group of educators, air trans-
portation executives, aviation engineers
and pilots. Its objective will be to carry
on a program of educational research to
advance the understanding of air trans-
portation and to prepare authoritative
material on aviation for the use of teach-

Standard Crane Signals



W.P.B. Labor-Management News

ers in schools and colleges, and the gen-
eral public. The work will be sponsored
by American Airlines, Inc.

Dr. N. L. Engelhardt, Jr., has been
appointed director of Air-Age Education

Research. He is a graduate of the Shef-
field Scientific School at Yale and Teach-
ers College, Columbia University and has
been closely associated with air trans-
portation since 1929. Before assuming
his present position, Dr. Engelhardt was
Director of Research in the public schools
of Newark, N. J. He has been a Research
Associate at Teachers College, Columbia
University, and taught at the University
of Florida and the University of Wis-
consin. He is the author of "Education
for the Air-Age," "New Frontiers of Our
Global World," and the Air World Map.

**Delayed Pickup Plan
Studied in Chicago**

Chicago motor carriers are pondering
the advisability of a proposed "delayed
pickup" directive submitted for their
consideration by the Office of Defense
Transportation. Under its terms the
truck operator who receives from a ship-
per an order for transportation service
would inform the shipper that the ship-
ment would not be picked up until the
following day, except where war freight
is involved.

The tentative order was inspired by
difficulties encountered by the local Truck
Vigilance Committee in its program to
speed up the loading and unloading of
motor vehicles, thereby increasing motor
transport facilities in the area. Shippers
complained that carriers failed to make

pickups at the time agreed on. In some cases, they reported, pickups were deferred for several days, resulting in congested shipping departments and delay to important war consignments.

Carriers retaliated with the complaint that shipments were not always ready when they arrived, and that shippers would call several carriers for the same pickup with resulting waste of mileage and equipment. Efforts to resolve this situation sent the impasse to Washington, from whence it was returned to the recently created Chicago area War Trucking Advisory Council for settlement. This Council, composed of representatives of the Central Motor Freight Assn., the Illinois Motor Truck Operators Assn. and the Cartage Exchange of Chicago, plans, according to its chairman Barney Cushman, Cushman Motor Express, to hold an industry conference for full discussion of the "delayed pickup" proposal.—(Slawson)

Coast Highway Commissions Congratulate Mexico

Declaring that the proposed inter-continental highway designed ultimately to link Alaska with the Argentine will be an inestimable boon to the development of truck freight traffic between the republics of the two Americas in the post-war period, State Highway Commissions of California, Oregon and Washington, at a recent meeting in Klamath Falls, Ore., discussed plans calling for completion of the International Pacific Highway.

The Pacific Coast groups expressed approval and commendation to the Mexican government on its highway program, stressing in particular the importance of an early completion of the Nogales-Guadalajara span in northern Mexico, a key sector of the 14,000-mile inter-continental project. (Herr)

To Rehabilitate Lake Shipping

MILWAUKEE—Rear Admiral H. L. Vickery, chairman, United States Maritime Commission's postwar planning committee, in a letter to Harry C. Brockel, Milwaukee port director, stated that the commission "can help and will do what it can to rehabilitate Great Lakes shipping."

In behalf of the Milwaukee harbor commission, Mr. Brockel had written a letter to the commission, appealing for consideration of the future of the Great Lakes package freighter trade and for construction of new, faster and more economical vessels for Great Lakes shipping.

Vickery wrote that he would give "special attention" to the request for new type freighters, and suggested that a Great Lakes committee be appointed, representing industry, shipping, docks and warehouses, to study Great Lakes shipping problems. (WTNB)

GREEN BAY, WIS.

Established 1903

LEICHT TRANSFER & STORAGE CO.

Main Office: 123 So. Broadway, Green Bay, Wis.
New York Office: Interlake Terminals, Inc., 271 Madison Ave.
Marinette Office: 1720 Pierce St., Marinette, Wis.



Merchandise Storage
Pool Car Distribution
Transit Storage
Household Goods Storage
Heated—Unheated—Yard
Storage
Waterfront Facilities
Stevedore Services

U. S. Customs, State and
Public Bonded
30 Car Track Capacity
Modern Handling
Equipment
Private Siding on C&NW,
CMSIP&P, G&W Lines
Reciprocal Switching all
lines

Complete local and over-the-road truck services with 70 units of all types of equipment, including low-bed trailers, winches and cranes.

Aero-Mayflower moving and storage.

Inquiries invited



MILWAUKEE, WIS.

ESTABLISHED 36 YEARS

850 Foot Dock



Largest in Wisconsin

18 Warehouses

A.D.T. Service

Specializing in—
Merchandise Distribu-
tion and Complete Branch House Services
TRACK CAPACITY FOR 50 CARLOADS
DEPENDABLE EXPERT QUICK SERVICE



MADISON, WIS.

LOW INSURANCE RATE

CENTRAL

STORAGE AND WAREHOUSE COMPANY

COLD STORAGE
DRY STORAGE
FREEZER STORAGE

612 W. Main St., Madison 3

MILWAUKEE, WIS.



LINCOLN

FIREPROOF WAREHOUSE CO.

WAREHOUSE SERVICE | RAILROAD SIDINGS
OF EVERY | AND
DESCRIPTION | DOCKING FACILITIES
LOCATED IN HEART OF BUSINESS DISTRICT
OFFICES: 206 W. HIGHLAND AVE.
Member of A.W.A.—W.W.A.—N.F.W.A.

MILWAUKEE, WIS.

ATLAS STORAGE CO.

MILWAUKEE'S ONLY DOCK WAREHOUSE
ON JOINT TRACKS CMSTP&RR AND C&NWRY

647 W. VIRGINIA ST.

MILWAUKEE, WIS.

— UNEXCELLED —

WAREHOUSING AND DISTRIBUTION FACILITIES
POOL CAR DISTRIBUTION • STORAGE IN TRANSIT

— SPECIAL —

FACILITIES FOR DRUMMING BULK OILS FROM
TANK CARS

Represented by
DISTRIBUTION SERVICE, INC.
New York—Chicago—San Francisco

MILWAUKEE, WIS.

NATIONAL TERMINALS CORPORATION

954 SO. WATER STREET, MILWAUKEE 4

Tel. Mitchell 5644

Milwaukee's most modern and best located Waterfront Warehouse.
Automobile storage. Warehousing on unit basis for spot stocks. Storage
"in transit". Pool car distribution, Customs Bonded.

Member of A.W.A. & W.W.A.

SPECIAL NOTICE

Have you sent in your proper listing for
the Annual Shippers' Directory Number of
D and W to be published in January?

MILWAUKEE, WIS.

"Milwaukee's Finest"

National Warehouse Corporation



—STATE BONDED—
EVERY CONCEIVABLE
WAREHOUSE & DISTRIBUTION
SERVICE AFFORDED
A.D.T. Service
468 E. Bruce St.
C. & N.W.R.R. Siding



MILWAUKEE, WIS.

TERMINAL STORAGE CO.

100-112 W. Seeboth St. — Phone Marquette 7091
Milwaukee, Wisconsin

Cooler, Freezer and General Merchandise Storage
Deep Water Dock, Private Siding
on C.M.&St.P. & P. R.R.

SHEBOYGAN, WIS.

MEMBER



SHEBOYGAN

Warehouse & Forwarding Co.

A Merchants & Manufacturers Warehouse

11th and Illinois Ave. Sheboygan, Wis.

Member of May. W.A. Wis. W.A.

Winter Driving Hazards

How to avoid trouble on the highway during the cold months ahead is a matter of importance to everybody. Some valuable suggestions are given on page 15 of this issue.

TORONTO, ONT.

M. A. RAWLINSON, Pres. & Gen. Mgr.

M. RAWLINSON, Ltd.

Established 1885

610 YONGE ST.

Seven Buildings to Meet All Requirements for Modern Storage and Distribution

Customs Bonded. Pool Car Distribution. Household Goods Moved, Packed, Shipped and Stored.

Members of CanS&T—NFWA—BAIFR—FWRA—TC&W—ALLIED VAN LINES

TORONTO, ONTARIO

TERMINAL WAREHOUSES LIMITED

Located on Toronto's Harbour Front in the heart of Industrial Ontario

COMPLETE MODERN STORAGE AND
DISTRIBUTION FACILITIES

Dry Storage Cold Storage Bonded Storage
Office and Light Manufacturing Space Lowest Insurance
Field Warehousing

MONTREAL, QUE.



St. Lawrence Warehouse Inc.

1-VAN HORNE AVENUE, MONTREAL, CANADA

200,000 SQ. FT. OF MODERN FIREPROOF SPACE
LOCATED IN THE EXACT CENTER OF THE CITY
OF MONTREAL

Canadian Customs Bond. Private Siding—8 Car
Capacity—Free Switching—All Railroad Connections

New York Representative: Frank J. Tully
27 Broadway, New York City. Telephone Worth 2-6438

MONTREAL, QUEBEC

Established 1903

W. G. KENWOOD, Pres. & Man. Dir.



Westmount Transfer & Storage Ltd.

205 Olivier Ave., Westmount, P. Q.

LOCAL AND LONG DISTANCE MOVERS

Private Room System for Storage

CRATING, PACKING and SHIPPING

Charges Collected and Promptly Remitted

Member: N. F. W. A., C. S. & T. A.

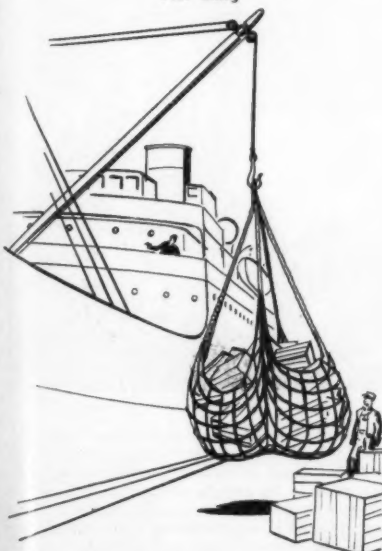
Sling
(Cargo Net)

(Continued from page 31)

supports are used, the idea being that the net will close in about the materials being handled, and adjust itself to their form when lifting.

Application—Cargo net slings are gen-

Net Sling



erally used at shipsides for handling miscellaneous cargo, which is piled directly into the net. It must be remembered, however, that as the net tightens, pressure is exerted against the packages on the inside of the pile, and therefore care should be taken in the use of this sling on fragile packages, and it should be limited to materials which are not easily broken, such as bales, casks, etc. The sling can be applied to hoisting apparatus of all types.

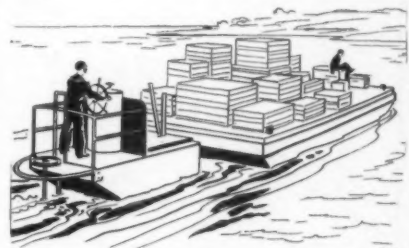
Sea Mule

Definition—A self-contained marine tractor for motorizing ordinary barges.

Description—The Sea Mule is a detachable self-contained marine tractor, constructed as a complete unit with the engine housed in a watertight hull, a short propeller shaft with outboard bearing attached to the rudder support post, and with a rudder controlled by means of chain or cable from a steering apparatus mounted on the deck of the hull, which is also the control point for power. The front end of the Mule is arranged with a quick-operating, simple clamping device which permits the power unit to be quickly attached to an ordinary barge, thus converting the barge into a powered carrier. The shallow draft of the Sea Mule conforms with the draft of the barge, thereby making it possible to use it in shallow water. If attached to a large barge or pontoon barge, it can be used also in deep water.

Application—this unit is particularly adaptable for use behind barges navigating inland waterways, rivers, etc.; also

for transportation in connection with pontoon barges handling cargo from ships anchored in a harbor where dock-



Sea Mule

ing facilities are not available. It is an application of the principle of having a tractor power unit available for operating several barge units, along the same lines as industrial tractor-trailer units are operated.

Additional Ships
For Brazilian Service

The War Shipping Administration expects to turn over three additional vessels to the Delta Line (Mississippi Shipping Co.) for operation in its regular service between Gulf ports and Brazil, WSA announced recently. These vessels will be added to three others assigned to the line for the same purpose last month.

Why the Middleman Is Helpful

MIDDLEMEN have been much maligned for many years. "Eliminate the middleman" has been the battle cry as far back as this writer can remember. However, middlemen possess certain important advantages, and here is a diagram that shows visually how to eliminate considerable commotion by utilizing middlemen.

Fig. 1 shows what happens when 10 dealers deal directly with 10 manufac-

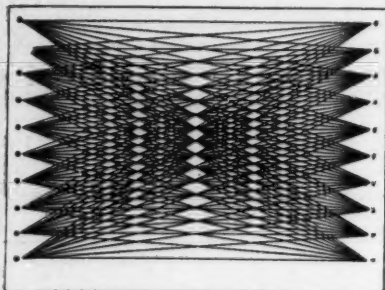


Fig. 1

turers. The 100 connecting lines represent 100 transactions. If there were 20 dealers and 20 manufacturers there would be 400 transactions. Fig. 2 shows how the middleman simplifies the situation. Instead of 100 transactions for the

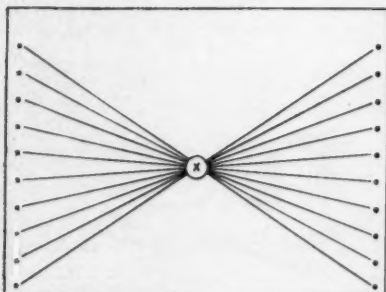


Fig. 2

dealers and for the manufacturers there are now only ten. In other words, the middleman reduces the number of transactions by 90 per cent. The greater the number of dealers and manufacturers involved, the greater the value of the middleman to both.

The telephone is an excellent illustration. If there were 20,000,000 telephones in this country, and if all "centrals" should be eliminated, each telephone would be obliged to have a direct line to every other telephone. How many lines would there then be? In view of the above the answer is 20,000,000 x 20,000,000 or 400,000,000,000 lines. The cost of such a system, of course, would be unbearable.—W. F. Schaphorst, M. E.

New Method of Packing Springs

A NEW method of packing springs for shipment which is said to save 1,500 bolts a year, 6,000 bd. ft. of lumber, and 9,000 ft. of banding iron has been developed by the Yellow Truck and Coach Mfg. Co., Pontiac, Mich., from suggestions made by Donald Wait, checker and scale operator, according to information recently released by the War Production Drive Headquarters.

"Several methods of baling springs have been tried previously," the report states. "One concerned laying four springs in line, placing a bolt through the bushings and using banding iron to secure the package. A stenciling board was also banded to the springs; this was to mark for destination, weight, etc.

"Because the bolt seriously damaged the bushings and the banding iron often broke, this was replaced by wooden boxes, banded for support. This method proved even less efficient because of the time it took to construct the box, the extra expense for the lumber involved

and the space needed to store the box being shipped.

"The new method deals with banding the four springs with stronger banding



material. Each spring is placed so that the clips holding the leaves together interlock and help hold the springs together.

"The results are a better package, the saving of 1,500 bolts a year, 6,000 bd. ft. of lumber, 9,000 ft. of banding iron, and conservation of space in box cars needed for shipment of other vital materials."

DECENTRALIZED STORAGE

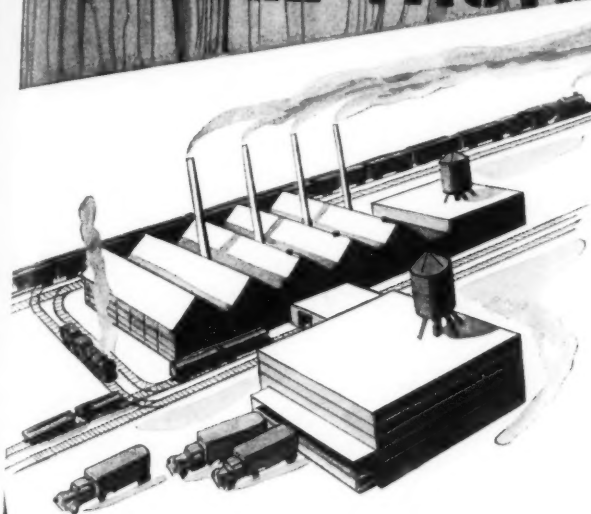


Courtesy Towmotor Corp.

A good example of decentralized storage, now being utilized by many war production plants to gain maximum output and efficiency from available facilities, is seen at Cleveland Pneumatic Tool Co., Cleveland, O., where stock piles of work in process are "stored" along production aisles. In spite of the exceedingly

compact arrangement, production flow, controlled by Towmotor lift trucks, is smooth and orderly. These powerful little industrial trucks, maneuver in the narrow aisles to pick up, move, or spot materials on a regulated schedule. This has resulted in a remarkably high utilization of floor space for production machinery.

STENCILED SHIPMENTS ROLL FASTER



**YOUR SHIPMENTS ARE
IMPORTANT**

**STENCIL ADDRESS YOUR
SHIPMENTS** with easily read,
permanent stenciled markings
—they'll roll faster, and costly de-
lays in transit will be eliminated.

DIAGRAPH-BRADLEY manu-
factures a stencil cutter for
every shipper's need.

Machines are available for
cutting letters $\frac{1}{2}$ ", $\frac{3}{4}$ ", $\frac{7}{8}$ ",
 $1\frac{1}{4}$ ", $1\frac{1}{2}$ " & $1\frac{3}{4}$ ".

Most government export ship-
ments require stenciling in let-
ter size $1\frac{1}{2}$ " or larger.

DIAGRAPH-BRADLEY is
the only manufacturer
making a stencil machine
for cutting letters larger
than 1".



FOR BEST RESULTS USE

- D-B Inks • D-B Stencil Board
- D-B Fountain Marking Brushes
- D-B Fountain Marking Pencils

**COMPLETE
SHIPPING ROOM
SUPPLIES**

World's Oldest and Largest Manufacturer of Stencil Machines

D.B. DIAGRAPH-BRADLEY

STENCIL MACHINES

DIAGRAPH-BRADLEY STENCIL MACHINE CORPORATION

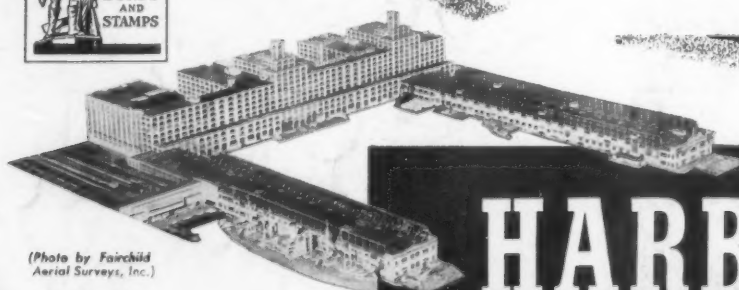
NO. 51 DIAGRAPH-BRADLEY BUILDING

ST. LOUIS, 8, MISSOURI

DISTRIBUTORS IN PRINCIPAL CITIES



(Photo by Fairchild
Aerial Surveys, Inc.)



We'll see it through!

We have come a long way down the road to victory since Pearl Harbor, but the task ahead of us and our staunch allies is still gigantic. The war has reached into the homes, hearts, and souls of all of us, and steeled us in the determination to see that its sacrifices will not have been in vain.

We approach 1944 with renewed hope that our faith and efforts will prevail—that, before so very long, a just and lasting peace will dawn on the world. It is in this spirit of optimism and good will that we extend sincere holiday greetings to our friends and patrons.

Why ask Uncle Sam to
settle for 10%? Put more
than that in War Bonds!

HARBORSIDE

WAREHOUSE COMPANY, INC.

R. B. M. BURKE, Vice-President

34 EXCHANGE PLACE, JERSEY CITY

Executive Office: 66 HUDSON ST., NEW YORK

